DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

NINETY-SEVENTH CONGRESS

FIRST SESSION

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PART 5—(Pages 1–481)

Department of Defense

Nondepartmental Witnesses

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DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

MONDAY, JUNE 1, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:10 a.m., in room S-406, the Capitol, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Schmitt, Andrews, Kasten, and D'Amato.

CENTRAL INTELLIGENCE AGENCY

INTELLIGENCE OVERVIEW

The subcommittee heard the classified testimony of Hon. William J. Casey, Director of Central Intelligence.

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

WEDNESDAY, JUNE 10, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:30 a.m., in room S–406, the Capitol, Hon. Mark Andrews presiding.

Present: Senators Stevens, McClure, Andrews, Rudman, Stennis, and Hollings.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

SPECIAL PROGRAMS

The subcommittee heard the classified testimony of Dr. Robert J. Hermann, Under Secretary of the Air Force.

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

THURSDAY, JUNE 11, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9 a.m., in room S-406, the Capitol, Hon. Warren Rudman presiding.

Present: Senators Schmitt, Andrews, and Rudman.

DEPARTMENT OF DEFENSE

UNDER SECRETARY OF DEFENSE (R. & D.)

COMMAND, CONTROL AND COMMUNICATIONS AND INTELLIGENCE RELATED ACTIVITIES

The subcommittee heard the classified testimony of Hon. James P. Wade, Jr., Principal Deputy Under Secretary of Defense, (Research and Development).

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

MONDAY, JUNE 15, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:05 a.m., in room S-406, the Capitol, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Schmitt, and Rudman.

DEFENSE INTELLIGENCE AGENCY

GENERAL DEFENSE INTELLIGENCE PROGRAM

The subcommittee heard the classified testimony of Lt. Gen. Eugene F. Tighe, Jr., USAF, Director, Defense Intelligence Agency.

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

WEDNESDAY, JUNE 17, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9 a.m. in room 1223, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens and Rudman.

NONDEPARTMENTAL WITNESSES

INTRODUCTION OF WITNESSES

Senator STEVENS. The subcommittee will come to order.

Today the subcommittee will receive testimony on the fiscal year 1982 Defense appropriations bill from witnesses outside the Department of Defense.

On behalf of the subcommittee membership, I want to welcome all of our witnesses this morning. In order to accommodate all of the groups scheduled to testify, we ask that you summarize your statement in 10 minutes or less and file your written statements for the record. Your testimony will be published as part of the subcommittee hearing record for this year.

NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

STATEMENT OF MAJ. GEN. FRANCIS S. GREENLIEF, NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

Senator STEVENS. Our first witness this morning is Maj. Gen. Francis S. Greenlief, executive vice president of the National Guard Association of the United States.

Good morning, sir.

General GREENLIEF. Good morning, Mr. Chairman. I do have an 8-minute summary. I will file my statement for the record.

Mr. Chairman and members of the committee, I appreciate this opportunity to present the views of the National Guard Association on appropriations for fiscal year 1982. If we had been permitted to address only one area of concern during this year's congressional hearings, we would have chosen, without hesitation, the subject of equipment. Nothing detracts more from the readiness and rapid deployability of the National Guard than equipment shortages and obsolescence. My full statement, however, addresses roles and missions, manpower, full-time unit support personnel, readiness and equipment.

COMBAT READINESS PRODUCTION

The production of combat readiness in the National Guard and Reserves requires the same essential ingredients as does production of combat readiness in the Active Forces. We must have an adequate number of trained soldiers and airmen. We must have on hand adequate amounts of modern deployable equipment to support our training requirements, and there must be within the total Army inventory sufficient stocks of modern deployable equipment to fully equip our units upon mobilization. We must have on board the full complement of full-time unit support personnel to recruit personnel, plan and supervise training, maintain equipment, and to administer our units and their personnel.

We must have operation and maintenance funding to support our training activities and to supply and support our units when committed to combat.

Although our roles and missions require us to fight when, where and as well as the Regulars, the National Guard is deficient in each of the aforementioned categories of "what it takes" to produce combat readiness.

BUDGET DEFICIENCIES FOR ARNG

The fiscal year 1982 budget provides $41.3 million for ARNG incentives. We are hopeful that those incentives will permit the ARNG to attain the programed end strength of 397,651—46,000 short of the wartime objective force. The fiscal year 1982 incentive program will provide initial payments, or anniversary payments, to 100,016 Army Guard men and women.

However, the fiscal year 1982 ARNG program calls for the gain of 175,623 men and women who could be eligible for enlistment or reenlistment incentives. Only 52,745, or 30 percent, of all personnel to be gained in fiscal year 1982 can be paid initial incentives.

The additional cost of providing enlistment/reenlistment initial incentives to an additional 61,000 selected personnel of all units of the Army Guard is $38 million.

There is a direct correlation between the number of full-time unit support personnel assigned to National Guard units and the level of readiness those units can produce. A table in my full statement demonstrates that there is a shortage of abut 9,800 full-time unit support personnel in the Army and Air National Guard.

INCREASE IN SUPPORT MANNING LEVEL

We urge increase in fiscal year 1982 National Guard appropriations to permit raising the fiscal year 1982 full-time unit support manning level to 90 percent of the requirement. Attainment of the 90-percent manning level would require an increase of 3,137 Army National Guard full-time unit support personnel and 351 Air National Guard full-time personnel.

Historically, the Army National Guard has been plagued by severe shortages of organizational clothing and equipment, repair parts, and operating supplies. Our units have not had cold weather clothing and they have not had the required repair parts load lists (PLL) which units need to maintain extended field duty.

ORGANIZATIONAL CLOTHING AND EQUIPMENT

The revised fiscal year 1982 operation and maintenance ARNG budget requests $153.8 million for organizational clothing and equipment. The Senate fiscal year 1982 Department of Defense authorization bill added $33 million to this appropriation. Considering the fiscal year 1981 Supplemental Appropriation for this account, appropriation of the full amount already authorized by the Senate will almost satisfy the full requirement for fiscal year 1982. We strongly urge that your committee recommend full funding of the amount included in the authorization bill.

Generally speaking, the ANG has been well supported by O. & M. appropriations. That is one of the reasons that 98 percent of all Air National Guard units are rated as combat ready, that is, C-3 or better.

5-YEAR MODERNIZATION PROGRAM

In the absence of a Guard/Reserve modernization plan from the Pentagon, which would be the logical source, the National Guard Association has prepared a 5-year modernization program for the two National Guard elements—Army and Air. We believe it represents a reasonable, commonsense approach to a serious problem. We recognize that we are not the real experts in the field and that the Army and Air Force spokesmen may find fault with some of our assumptions and with the priorities we have assigned.

It does not take such refined expertise, however, to see that the only way to modernize, in this age of long leadtime items and high costs, is to establish a program extending over a predetermined number of years, then stick to that program. To this point, neither have been done.

We are delighted by the action of the Senate Committee on Armed Services in recommending an add-on of $526.1 million for National Guard and Reserve equipment and an add-on of $33 million to the O. & M. ARNG appropriation for organizational clothing and equipment.

We believe the establishment of a $400 million program as a first step toward equipping the ARNG, with a first-year increment of $50 million, is an outstanding effort. The inclusion of $185 million for equipment in the category of "other equipment" is of extreme importance.

HAWAII AIR DEFENSE SYSTEM

We appreciate the recent action of this subcommittee which added $12 million to the fiscal year 1981 supplemental which will allow automation of the Hawaii Air Defense System. This Association recommends further communications equipment add-ons for Air National Guard Communications units committed to the Rapid Deployment Force and for "other equipment" required by the ANG tactical control and combat communications units.

The language of the Senate military authorization bill which requires the Secretary of Defense to present an annual report to the Congress provides a mechanism which can solve Guard/Reserve equipment problems.

In summary, Mr. Chairman, we urge that your committee recommend full funding of the revised fiscal year 1981 budget request for the Army and Air National Guard.

AREAS FOR ADDITIONAL FUNDING

In addition, we urge that your committee recommend additional funds to:

One, permit payment of initial enlistment or reenlistment payments to an additional 61,000 men and women.

Two, procure the additional equipment for the National Guard and Reserves as included in the authorization bill.

Three, support the authorization bill increase in operations and maintenance, Army National Guard, for organizational clothing and equipment.

Four, permit procurement of at least $50 million of the items listed in the $185 million "Other procurement" package of the authorization bill.

Five, permit procurement of at least $33.4 million of "Other equipment" for ANG communications units.

Six, permit employment of additional full-time unit support personnel so as to bring the full-time manning level in the Army and National Guard to 90 percent of the validated requirement.

Mr. Chairman, the National Guard is deeply appreciative of the truly outstanding support of the National Guard which continues to be provided by the Congress, as a whole, and this committee, in particular.

Thank you, Mr. Chairman.

Senator **STEVENS**. Thank you very much, General. Any questions of General Greenlief, Senator Rudman?

Senator **RUDMAN**. No, I have none.

Senator **STEVENS**. A very good statement. We appreciate your cooperation and your suggestions.

General **GREENLIEF**. Thank you, sir.

[The prepared statement of General Greenlief follows:]

PREPARED STATEMENT OF MAJOR GENERAL FRANCIS S. GREENLIEF (RET.)

NATIONAL GUARD ASSOCIATION OF THE UNITED STATES

Mr. Chairman, and members of the committee, I appreciate this opportunity to present the views of the National Guard Association on appropriations for fiscal year 1982.

If we had been permitted to address only one area of concern during this year's Congressional hearings, we would have chosen, without hesitation, the subject of equipment. Nothing detracts more from the readiness and rapid deployability of the National Guard than equipment shortages and obsolescence. My statement, however, addresses Roles and Missions, Manpower, Full-Time Unit Support Personnel, Readiness (to include Operation and Maintenance support) and equipment.

ROLES AND MISSIONS

The Army National Guard (ARNG) and Air National Guard (ANG) are the only components of the United States military force which are tasked by law with a dual mission, i.e. a Federal mission and a State mission.

As a result of the Total Force Policy, the units of the National Guard have been assigned significant roles and missions in our nation's war plans — so significant that the Army and Air Force cannot reasonably be expected to conduct a conventional war successfully unless the National Guard can perform its wartime mission when and where required.

As structured, the ARNG component of the Total Army force included:

- 27 percent of the total Army personnel strength.
- 33 percent of the combat divisions.
- 73 pe[illegible] of the separate brigades.
- 57 percent of the infantry battalions.
- 41 percent of the mechanized infantry battalions.
- 43 percent of the armored battalions.
- 57 percent of the armored cavalry regiments.
- 50 percent of the field artillery battalions.

- 30 percent of the aviation battalions.

The 91 flying units of the ANG included the following percentages of aircraft dedicated to the various roles and missions of the total Air Force:

- 17 percent of the total Air Force aircraft.
- 42 percent of all electronic warfare aircraft.
- 65 percent of all air defense interceptors.
- 57 percent of all tactical reconnaissance aircraft.
- 30 percent of all tactical airlift aircraft.
- 27 percent of all tactical fighter aircraft.
- 17 percent of all strategic tanker aircraft.

In addition, the 231 non-flying ANG units are essential to wartime operations of the total Air Force. The Hawaii ANG, for example, furnishes the air defense ground radar environment for the Hawaii Air Defense System. Overall, 70 percent of the tactical communications capability of the Air Force is provided by the ANG.

Although the National Guard is now required to fight when, where, and as well as the Regulars, many National Guard units have not been provided the resources needed to fight when, where, and as well as the Regulars.

During FY80, the Governors of the several States found it necessary to call on the Guard to perform State emergency duty on 469 occasions in 47 States and territories. These State emergencies required the services of 30,000 National Guard soldiers and airmen and 203,000 man days of service were required. These mini-mobilizations tested the troops and leadership under circumstances of strain, thus improving the capability of the units to perform under pressure. If the units of the National Guard had not been available for service in the States, the Governors would in many instances have been forced to call upon the President to provide active troop units for emergency service in the States.

WHAT DOES IT TAKE?

The production of combat readiness in the National Guard and Reserves requires the same essential ingredients as does production of combat readiness in the active forces. We must have an adequate number of trained soldiers and airmen. We must have on hand adequate amounts of modern deployable equipment to support our training requirements, and there must be within the total Army inventory sufficient stocks of modern deployable equipment to fully equip our units upon mobilization. We must have on board the full complement of full-time unit support personnel to recruit personnel, plan and supervise training, maintain equipment and to administer our units and their personnel. We must have Operation and Maintenance funding to support our training activities and to supply and support our units when committed to combat. Finally, we must have facilities to house our units and their equipment, which adequately support training, and in which necessary administrative, supply and maintenance activities can be performed.

Although our roles and missions require us to fight when, where and as well as the Regulars, we are deficient in each of the aforementioned categories of "what it takes" to produce combat readiness.

MANPOWER

Army National Guard

Although a severe manpower shortage continues to exist in the ARNG, net gains have been registered in the last two years. During FY80, the ARNG achieved a net gain each month. The end FY80 strength of the ARNG was 366,585, up 21,280 above FY79 end strength. Although the FY80 end strength was 8,000 greater than the budgeted end strength, it was 77,400 short of the ARNG's wartime strength requirement of 444,000.

The pre-trained manpower pool of the Army, the Individual Ready Reserve (IRR), is too small to fill the active Army and provide for combat loss replacements. Because the Selective Service System and the Army's training base cannot begin to produce trained soldiers until about seven months after conscription begins, the wartime strength requirement for the ARNG must be considered the peacetime strength requirement.

Beginning in FY78, the Congress has provided an effective incentive program which has significantly increased the ability of the ARNG to improve its recruiting and retention of personnel. Because of the leadership and hard work of the Adjutants General, commanders, and the full-time recruiting force, the personnel strength of the ARNG is growing.

In FY78, the ARNG was provided $3 million to support a test enlistment/reenlistment incentive program. In FY81, the ARNG will have $31.7 million available to pay for the wide variety of incentives now offered. Although these incentives can be provided to less than half of all the enlistees and reenlistees who will be gained in FY81, we believe the ARNG will attain a programmed end strength of 385,776. But that achievement will leave the ARNG short 58,000 of its wartime strength requirement.

The FY82 budget provides $41.3 million for ARNG incentives. We are hopeful that those incentives will permit the ARNG to attain the programmed end strength of 397,651, 46,000 short of the wartime objective force. The FY82 incentive program will provide initial payments, or anniversary payments, to 100,016 Army Guard men and women. Selected personnel in 54 percent of all Army Guard units can be paid incentives. That also means that the personnel of 46 percent of the units cannot be paid incentives.

Only personnel of the earliest deploying units are eligible for incentives. Yet, all units of the ARNG are scheduled for deployment before the currently available Selective Service System and the Army training base can produce trained fillers for the later deploying units.

The cost of providing cash benefits for every enlistee or reenlistee of the ARNG would range from $200 to $300 million. We recognize that cost as very substantial. However, the additional cost of providing enlistment/reenlistment incentives to selected personnel of all units of the ARNG is only $38 million.

We urge that $38 million be added to the National Guard Personnel Army appropriation to permit offering enlistment/reenlistment incentives to selected personnel of all units of the ARNG.

Air National Guard

The Air National Guard has exceeded its budgeted strength for the last two years. We are confident that the ANG will attain its FY82 programmed end strength of 99,054, 98 percent of its full wartime strength. As the ANG gets closer to its full wartime strength, the difficulty in filling critical skills will make attaining 100 percent strength more difficult.

In FY79 and FY80, the ANG was permitted only a token incentive program. However, the FY81 program of $4.5 million and the FY82 program of $4.7 million appear adequate and are producing excellent results. In FY81, the ANG used incentives to attract personnel into the critical skills positions across-the-board in all units. In FY82, the ANG will use its available incentives to fill specific critical skills shortages in specific units. This pinpoint management of incentives will permit utilization of incentives to improve specific unit C-Ratings.

FULL-TIME UNIT SUPPORT PERSONNEL (FTUS)

There is a direct correlation between the number of full-time unit support personnel assigned to National Guard units and the level of readiness those units can produce.

The following table displays the requirements for FTUS personnel, as validated by the Departments of the Army and Air Force, the number of personnel assigned, and the shortages in the ARNG and the ANG:

FTUS Personnel FY82

(NG Technician and Full-Time Military)

	ARNG	ANG
Requirements	34,866	27,003
Technicians Assigned	22,393	21,830
Full-Time Military Assigned	5,691	2,117
Total Assigned	28,084	23,947
% Manned	81%	88.7%
Unfunded Requirement	6,729	3,056

This shortage of FTUS personnel precludes the ARNG from attaining required readiness levels and will impede the ANG's ability to maintain its current high level of readiness as it continues to convert its units to more modern weapons systems.

We are appreciative of the action of your committee in approving the recent reprogramming request of the Chief of the National Guard Bureau transferring FY81 funds from the Operation and Maintenance appropriation to the Military Personnel appropriations to permit additional Full-Time Unit Support personnel to be brought on board.

We urge an increase in FY 1982 National Guard appropriations to permit raising the FY 1982 Full-Time Unit Support manning level to 90 percent of the requirement. Attainment of the 90 percent manning level would require an increase of 3,137 Army National Guard full-time personnel and 351 Air National Guard full-time personnel. The added Full-Time Unit Support personnel could be either full-time National Guard military personnel or National Guard military technicians.

READINESS

Because of the security classification of the readiness status of units, it is difficult for our Association to present data on the readiness ratings of National Guard units. However, unclassified data is available to demonstrate National Guard unit readiness in general terms.

Army National Guard

ARNG units are assigned an Authorized Level of Organization (ALO). The assigned ALO relates to the required deployment date of ARNG units and establishes goals or objectives to be achieved by those units. The following chart depicts the percentage of National Guard units, by Army Area, which have achieved their prescribed ALO objective:

	Overall (%)	Strength (%)	Equipment on Hand (%)	Training (%)
1st Army	52	72	56	75
5th Army	47	60	58	69
6th Army	49	54	67	70
Total	49	64	58	72

Although the percentages are not high, you will note that a higher percentage of units have attained their strength and training objectives than have attained their equipment objectives.

Many other factors affect readiness than strength, equipment and training. In my discussion of manpower, I discussed the shortages of Full-Time Unit Support (FTUS) personnel. The National Guard technician part of FTUS personnel is funded in the Operations and Maintenance appropriation. The combination of inadequate funds, hire freezes and Congressionally-directed tests have served to hold the assigned technicians far below the requirement.

One of the most serious shortfalls is the number of FTUS personnel employed for training planning, management and supervision. One of the reasons the ANG enjoys higher readiness levels is that the ANG is much more adequately supported by FTUS personnel.

Historically, the ARNG has been plagued by severe shortages of organizational clothing and equipment, repair parts and operating supplies. Our units have not had cold weather clothing and they have not had the required repair parts load lists (PLL) which units need to maintain extended field duty.

There has never been enough O&M money, and these items were always deferred in the hope that we wouldn't go to war in that particular budget year.

The situation of the ARNG's OH-6A helicopters demonstrates the impact of lack of operations and maintenance support. The ARNG has on hand 385 OH-6A scout helicopters, a good operational helicopter. However, because adequate parts have not been procured, these aircraft are not logistically supportable upon deployment, and the Army has determined that these OH-6A helicopters are not deployable.

The Revised FY 1982 O&MARNG budget requests $153.8 million for organizational clothing and equipment. The Senate FY 1982 Department of Defense Authorization Bill added $33 million to this appropriation. Considering the FY 1981 Supplemental Appropriation for this account, appropriation of the full amount already authorized by the Senate will almost satisfy the full requirement for FY 1982. We strongly urge that your committee recommend full funding of the amount included in the Authorization Bill.

Air National Guard

Generally speaking, the ANG has been well supported by O&M appropriations. That is one of the reasons that 98 percent of all ANG units are rated as combat ready, i.e. C-3 or better.

Most ANG units have on hand 90 percent of required operating supplies and spares in War Reserve Supply Kits (WRSK). In exceptional cases, such as A-10 units where the necessary items are not yet available, and F-4 units where adequate parts are not now available, the Air Force plans to locate those ANG units at overseas bases with Air Force wings which do have WRSK to support ANG units. The Air Force program provides support even for those ANG units still flying aircraft with only marginal capability.

The ANG is not experiencing the problem of retaining pilots, our maintenance is superb, and because of the nature of our operations, our units are less expensive to maintain than active units. Yet many of our flying units are limited to 18 aircraft per squadron; whereas their Active Air Force units are equipped with 24 aircraft. Equipping our units with the full Air Force Primary Aircraft Authorization (PAA) makes sense. Our units could produce a 33 percent increase in combat capability with an increased operational cost of about half that percentage.

TOTAL FORCE AND EQUIPMENT

At the end of World War II, and even the Korean War, 30 days was considered the standard advance notification to give Guard and Reserve elements before ordering them to active duty. Today, many Guard units will be in full operation, and in some cases in the combat zone, by the time that thirtieth day comes around.

Many of the weapons and equipment items our units would need to perform their operational missions are entirely lacking. Others are available only in "training" quantities. Still others, although they are described as deployable and usable in a combat environment, would not be wholly effective because they are of an older generation and are not compatible with Active Army and Air Force equipment. "Mix and match" may be fine for household furnishings, or clothing ensembles, but it works very badly when your reference is sophisticated telecommunications, complex fire control devices, or high-technology weapons systems. The old and the new just don't blend well; some don't blend at all. In many cases, then, our situation is like that of the ocean convoy that is slowed to speed of the slowest ship. For some types of equipment, the capability of the whole system is held down to not much more than the capability of the oldest part of the system.

This demonstrates very clearly why the Guard needs more equipment, and newer equipment. It doesn't need equipment merely because the units exist. It needs equipment because its units are required to perform essential missions in contingency plans. If the units are required, then equipment is required for them, regardless of whether the units are Active, Guard or Reserve. That's what the Total Force idea is all about, and that's how contingency plans are structured.

It was clearly stipulated right at the inception of Total Force that first-line equipment had to go along with first-line missions.

In his first letter defining the Total Force idea, in 1970, Defense Secretary Melvin Laird directed the Services to "provide and maintain combat standard equipment for Guard and Reserve units in the necessary quantities."

The Total Force doctrine has been reaffirmed and emphasized by every succeeding Secretary of Defense. More urgent missions have been assigned, and readiness goals have been raised by a substantial degree. The need to properly equip the Guard and Reserve has been restated many times. But never has the Total Force reality matched the Total Force promise.

The Guard received substantial quantities of equipment in the early Total Force years, mostly as a result of the phasing down of operations in Vietnam. But we were starting from so far back that the new issues never even began to satisfy the need. The Army Guard equipment inventory in 1970, for example, stood at $1.6 billion in budget value, a mere 33 percent of its mobilization requirement.

Since that time, the story has been one of taking two steps forward and falling back one. Equipment that would have gone to the Guard was diverted to various foreign clients, commencing with the resupply of Israel following the destructive Six-Day War in 1973. Other equipment that we could have expected to receive has been sent to Europe, in a program to build up prepositioned stocks from three to six combat divisions. The five-year defense plans may show the fifth year to be the get-well year for the Guard, but that red-letter event never comes any nearer. It moves back each year so as to always be the target for the fifth year.

Today, after ten years of Total Force, the Army National Guard possesses an equipment inventory totalling $7.4 billion in budget value. That represents 69 percent of our inflation-boosted mobilization requirement for approximately $11 billion worth of equipment. The significant factor in these statistics is readily apparent.

The Army Guard equipment status has been improving only by 3.6 percent of the M-Day requirement annually. That can hardly be described as notable progress in a period when the Guard has been earmarked for greater readiness and more urgent missions.

The above statistics also mean that we still are 31 percent below the quantities of equipment we would require for a major mobilization. There is hardly room for satisfaction in those statistics. Just as significant is the fact that there has been no progress made, for the Army Guard, in the past three years. About $1 billion worth of newer equipment has found its way into the Army Guard inventory in those three years, but it still stands at only 69 percent of the M-Day requirement, exactly where it stood three years ago.

Obviously, the process of modernizing the Army Guard has been stretched across so many years that many of the equipment items issued seven to ten years ago, at the beginning of the modernization process, have now become obsolete and thus non-deployable. We are barely keeping up with the inexorable march of obsolescence.

The Chief of the National Guard Bureau, Lieutenant General LaVern E. Weber, emphasized our situation in testimony before the Subcommittee on Military personnel and Compensation early in March, and his statement bears repeating. He said: "The Army National Guard plays a central role in the Army's conventional forces in that one-third of the Army's divisions are Guard divisions. The overall readiness of those eight divisions is low and has not changed significantly in the last three years....Equipment shortages preclude significant improvement in overall readiness levels. The FY 1982 budget fails to improve this situation."

In response to a question during a 4 February hearing of this committee, the Chief of Staff, United States Army, General Edward C. Meyer, said:

"The Reserve and National Guard combat units are critically short of equipment. They have many of the same equipment shortages as our Active Componants, only to a worse degree. The majority of Reserve and National Guard units understandably are equipped at a lower priority than our Active units. Moreover, we are committed to improving first the units which go into battle first. In the Reserve Components, most of the early deploying units — those that enjoy a relatively high priority -- are support units. The hard fact of the matter is that our Reserve and National Guard major combat units do not receive much in the way of equipment improvements as a result of this budget. Major equipment readiness improvements for the Reserve Components will require a massive increase to our funding. We will be addressing this to a limited degree in our FY82 Budget Amendment request and in the Five-Year Defense Program."

It no longer is enough to say, as many do, that the Guard has enough equipment to conduct training. Training is not our mission. Our mission is to be prepared to fight. The time lapse between training status at home station and deployment overseas is so short that full equipment for wartime missions must be available during peacetime. Moreover, after mobilization, Guard units will be working alongside, and integrated with, Active units whose equipment is vastly more modern than the substitute equipment with which the Guard is training. Guard units forced to train with obsolescent equipment may in many cases be producing only ersatz readiness.

As the committee is aware, modernization of the Air reserve forces has proceeded at a more rapid and orderly pace than it has in Army elements. Consequently, most Air National Guard units are appreciably readier to perform their wartime combat missions than the Army Guard. Nevertheless, there are serious deficiencies that would impede a fully effective combat performance. Those deficiencies do not consist so much of shortages as they do of obsolescence and the limited capability of some on-hand aircraft.

The F-4 fighters offer a case in point. The F-4 was a versatile, first-class airplane, long regarded as one of the world's premier fighter aircraft. But technology has advanced since the F-4 was designed, and the Guard F-4's now average 16 years in age. Soon, they'll assume the role played so long by another truly great fighter, the F-100, which was in the Air Guard inventory over-long — they'll be relics of a bygone age.

The Air Guard provides 17 percent of the aerial refuelling force -- the aircraft and crews that refuel SAC bombers, fighters, and nowadays, even the strategic airlifters. It performs this mission with 104 of the Air Force's 615 KC-135 tankers. Those planes, as members of the committee are aware, are military versions of the old but reliable Boeing 707's. However, those tankers still have their original J-57 engines, years behind current state-of-the-art. The Air Force believes that with new engines and certain other modifications, those refuellers can do the job required of them well into the 21st century.

NGAUS FIVE-YEAR MODERNIZATION PROGRAM

In the absence of a Guard/Reserve modernization plan from the Pentagon, which would be the logical source, the National Guard Association has prepared a five-year modernization program for the two National Guard elements, Army and Air. We believe it represents a reasonable, common-sense approach to a serious problem. We recognize that we are not the real experts in the field and that Army and Air Force spokesmen may find fault with some of our assumptions and with the priorities we have assigned.

It does not take such refined expertise, however, to see that the only way to modernize, in this age of long lead times and high costs, is to establish a program extending over a pre-determined number of years, then stick to that program. To this point, neither have been done.

As best we could determine, it will require some $2.6 billion to fully modernize the Army National Guard (not including all of the spares, repair parts, and other support items that accompany procurement of major equipment), and about $7.0 billion to fully modernize the Air National Guard. That is about $10 billion in all. The high cost of the Air National Guard modernization stems chiefly from the astronomical cost of modern jet aircraft.

We do not consider it essential to provide each unit with 100 percent of its wartime equipment requirement, but it must at least be available, someplace, for rapid issue on M-Day.

Our proposed five-year Guard modernization program is attached to this statement. It breaks down into annual increments, both in dollars and in quantities of equipment to be funded. For FY82, it urges funding of $745.4 million for the Army Guard and $951.6 million for the Air Guard, to accomplish the first stage of the five-year program. In addition, we strongly recommend that the J-79 engines of the F-4/RF-4 aircraft be modified to the low smoke configuration, and that the tank killing capability of the A-7/F-4 be improved by the addition of the 30mm gun pod.

We recognize that Congressional add-ons are far from being the best way to provide equipment for the Guard and Reserves. But up to this point, it has been the only way open to us.

We are delighted by the action of the Senate Committee on Armed Services in recommending an add-on of $526.1 million for National Guard and Reserve equipment and an add-on of $33 million to the OMARNG appropriation for organizational clothing and equipment.

We believe the establishment of a $400 million program as a first step toward equipping the ARNG, with a first year increment of $50 million, is an outstanding effort. The inclusion of $185 million for equipment in the category of "other procurement" is of extreme importance.

We appreciate the recent action of this subcommittee which added $12.0 million to the FY1981 Supplemental which will allow automation of the Hawaii Air Defense System (HADS). This Association recommends further communications equipment add-ons for Air National Guard Communications units committed to the Rapid Deployment Force and for "other equipment" required by ANG Tactical Control and Combat Communications units.

The language of the Senate Military Authorization Bill which requires the Secretary of Defense to present an annual report to the Congress on plans to equip the National Guard and Reserves is, in our view, one of the most important pieces of National Guard and Reserve legislation since the Reserve Forces Bill of Rights and Vitalization Act of 1967. This language, if it becomes law, provides a mechanism which can solve Guard/Reserve equipment problems.

SUMMARY

In summary, Mr. Chairman, we urge that you recommend full funding of the Revised FY 1982 Budget Requests for the Army and Air National Guard.

In addition, we urge that your committee recommend additional funds to:

1. Procure the additional equipment for the National Guard and Reserves as included in the Authorization Bill.
2. Support the Authorization Bill increase in Operations and Maintenance Army National Guard for organizational clothing and equipment.
3. Permit procurement of at least $50 million of the items listed in the $185 million "Other Procurement" package of the Authorization Bill.
4. Permit procurement of at least $33.4 million of "other equipment" for ANG Communications units.
5. Permit employment of additional Full-Time Unit Support personnel so as to bring the full-time manning level in the Army and Air National Guard to 90 percent of the validated requirement.

Mr. Chairman, the National Guard is deeply appreciative of the truly outstanding support of the National Guard which continues to be provided by the Congress as a whole, and this committee, in particular.

BIOGRAPHY

MAJOR GENERAL FRANCIS S. GREENLIEF (Ret.)
Executive Vice President
National Guard Association of the United States (1974-)

Major General Francis S. Greenlief joined the staff of the National Guard Association of the United States in September 1974, after retiring as Chief, National Guard Bureau on 1 July 1974. He was appointed the Executive Vice President of the 48,000-member Association in September 1975.

General Greenlief was born in Hastings, Nebraska on 27 July 1921. He completed high school there and enrolled in the University of Nebraska in 1939 to study business administration.

He enlisted in Company G, 134th Infantry, Nebraska National Guard in Hastings on 5 July 1940, and was ordered to active duty with his unit on 23 December 1940 as a corporal. At the time of his entrance to Infantry Officer Candidate School in May 1942, he was Acting First Sergeant of the same Company.

General Greenlief was graduated from Officer Candidate School and was commissioned a second lieutenant, Infantry, on 25 August 1942. He served as Platoon Leader and Commanding Officer, Company L, 134th Infantry in the European Theater of Operations from May 1944 until August 1945, participating in the Normandy, Northern France, Rhineland, and Ardennes Campaigns. He was released from active duty on 5 January 1946.

On 3 November 1947, General Greenlief rejoined the Nebraska National Guard as Commanding Officer, Company G, 134th Infantry. He subsequently served as S-3 of the 134th Infantry Regiment, acting Assistant Adjutant General of Nebraska, G-4 of the 34th Infantry Division and Division Chief of Staff. He was promoted to colonel on 1 July 1957.

As a colonel, he was ordered to active duty from the Nebraska Army National Guard and assigned as Executive Officer, Army Division, National Guard Bureau on 1 January 1960. He was appointed brigadier general and designated Assistant Chief (Army), National Guard Bureau, on 3 November 1962.

General Greenlief was appointed as Deputy Chief, National Guard Bureau, on 14 September 1963 and was promoted to major general on 9 February 1965. On 13 September 1967, he was extended for an additional four-year term. On 20 April 1970, he was appointed Director, Army National Guard in addition to his duties as Deputy Chief, National Guard Bureau.

THE NGAUS ARNG FIVE-YEAR EQUIPMENT PROCUREMENT PROGRAM

(1) AIRCRAFT

AH-1S TOW Cobra attack helicopters to replace on-hand non-deployable gun ships which have no anti-armor capability. In FY 1990, when programmed buy of the new advanced attack helicopters (which begins in 1983) has been completed, and AH-1S attack helicopters from the active inventory have been placed in ARNG attack helicopter units, the total number of advanced helicopters and AH-1S will be 168 less than the Army aircraft authorization objective.

If AH-1G and TH-1G helicopters now in the Army inventory were programmed for rebuild to the AH-1S TOW configuration, procurement figures shown below could be significantly reduced. NGAUS will work for funding of AH and TH helicopter rebuild in FY's 83, 84 and 85 so as to reduce the figures shown below.

Procurement cost of 168 AH-1S shown below includes cost of ground support equipment and concurrent spares.

	FY82	FY83	FY84	FY85	FY86
($/M)	214.2	214.2	214.2	-	-
(Procurement)	56	56	56	0	0

UH-1H troop carrying helicopter. Required are 1,136; 1,021 are on hand, 115 are short. No special procurement of the UH-1H is recommended. Procurement of troop carrying helicopters should be part of the total Army UTTAS Black Hawk buy.

U-21 fixed-wing utility aircraft. Required are 81 (11 for Mob) four are on hand, 77 are short. Buy of 77 U-21's is not recommended, as a large part of this requirement could be met by directing the USAF to transfer its C-7 assets (46) to the ARNG for this mission (10 C-7 are being transferred to the ARNG in 1981), and by directing the Army to trasfer 16 U-21 to the ARNG as sixteen C-12 are delivered in accordance with the wishes of the Congress as expressed in the FY80 and FY81 appropriations. Because of possible Army requirements, NGAUS does not expect all 36 of the remaining C-7's in the Air Force inventory to be available for the ARNG is recommending an additional add-on buy of C-12 aircraft in FY82 so that 12 U-21 can fall out to the ARNG. If insufficient numbers of C-7 aircraft are available, NGAUS will ask for more C-12's in the budget in 1983 and later.

	FY82	FY83	FY84	FY85	FY86
($/M)	24.1	-	-	-	-
Procurement	12	0	0	0	0

OH-58 Observation Helicopter. The ARNG scout and observation aircraft fleet is currently a combination of OH-58 and OH-6. DA DCSLOG advises that 385 OH-6A aircraft on hand are not logistically supportable upon deployment. Until the AHIP program selects either the OH-6 or OH-58 for modernization, NGAUS cannot judge whether new OH-58's should be procured to meet ARNG deployment requirements, or whether those requirements could be satisfied by development of a parts supply system to support the OH-6 in combat. NGAUS will await the AHIP program selection before deciding on either of those options.

(2) TACTICAL ADPE

Modern automatic data processing equipment required for logistical and administrative management of major Army National Guard units.

	FY82	FY83	FY84	FY85	FY86
($/M)	28.500	22.500	22.500	22.500	15.000
Procurement	19	15	15	15	10

(3) TANKS

Total of all series of deployable tanks in the ARNG is 2,749. Required are 3,474 to bring each tank unit to full wartime strength. Overall shortage is 725, but war reserve stocks have 339 available. Total ARNG added requirement is 386.

	FY82	FY83	FY84	FY85	FY86
($/M)	76.720	55.280	55.280	55.280	33.170
Procurement	98	80	80	80	48

(4) TRUCKS

Five Ton — ARNG is authorized 4,258, has 3,272 on hand and is short 986.

	FY82	FY83	FY84	FY85	FY86
($/M)	11.840	8.160	8.160	8.160	3.920
Procurement	390	200	200	200	96

Eight Ton — ARNG is authorized 1,267, has only 44 on hand, requires 1,223 to deploy.

	FY82	FY83	FY84	FY85	FY86
($/M)	12.310	9.730	9.730	9.730	7.100
Procurement	310	245	245	245	178

Twenty-Ton — ARNG is authorized 975, has 224 on hand, requires 751 for deployment

	FY82	FY83	FY84	FY85	FY86
($/M)	14.070	11.250	11.250	11.250	7.780
Procurement	190	152	152	152	105

(5) ARTILLERY

M110 8'' Self-Propelled Howitzers. Requirement is 308, with 220 on hand, shortage of 88.

	FY82	FY83	FY84	FY85	FY86
($/M)	12.720	9.540	9.540	9.540	5.300
Procurement	24	18	18	18	10

M109 155mm Self-Propelled Howitzers. Requirement is 888, 492 on hand, 396 are short. (Requirement includes increase to 8 Guns per Btry).

	FY82	FY83	FY84	FY85	FY86
($/M)	28.500	22.800	22.800	22.800	15.960
Procurement	100	80	80	80	56

155mm Towed Howitzers. ARNG requires 440, 354 are on hand, 86 are short. (Requirement includes increase to 8 Guns per Btry).

	FY82	FY83	FY84	FY85	FY86
($/M)	13.310	4.580			
Procurement	64	22			

(6) RADARS

AN/MPQ 4 Counter Battery Radar. Requirement is 57, 50 are on hand, seven short.

	FY82	FY83	FY84	FY85	FY86
($/M)	1.910				
Procurement	7				

AN/PPS-5 Ground Surveillance Radar. Requirement is 426, 300 are on hand, 126 short.

	FY82	FY83	FY84	FY85	FY86
($/M)	5.820				
Procurement	126				

AN/TPS-25 Surveillance Radar. Requirement is 25, 15 are on hand, 10 are short.

	FY82	FY83	FY84	FY85	FY86
($/M)	0.450				
Procurement	10				

(7) AIR DEFENSE

All ARNG Air defense units are equipped with obsolete M-42 Dusters of Korean War vintage.

Chapparal Missile System. Requirement is 192, on hand 0.

	FY82	FY83	FY84	FY85	FY86
($/M)	34.600	34.600	34.600	17.300	17.300
Procurement	48	48	48	24	24

Vulcan Gun System. Requirement is 192, on hand 0.

	FY82	FY83	FY84	FY85	FY86
($/M)	39.800	39.800	39.800	19.900	19.900
Procurement	48	48	48	24	24

(8) TRACKED CARRIERS

81mm Mortar Carrier. Require 387, have 242 on hand, short 145.

	FY82	FY83	FY84	FY85	FY86
($/M)	7.52	7.52	5.9		
Procurement	52	52	41		

4.2" Mortar Carrier. Require 590, have 483 on hand, 107 short.

	FY82	FY83	FY84	FY85	FY86
($/M)	5.98	5.98	3.28		
Procurement	42	42	23		

Cargo Carrier. Require 1,004, 842 are on hand, 162 are short.

	FY82	FY83	FY84	FY85	FY86
($/M)	8.1	8.1	5.67		
Procurement	60	60	42		

Command Post Carrier. Require 1,292, have 1,003 on hand, 289 are short.

	FY82	FY83	FY84	FY85	FY86
($/M)	10.4	8.37	8.37	8.37	6.21
Procurement	72	58	58	58	43

Tow (wire guided anti-tank missile) Carrier, 774 required, have 206 on hand, 558 short.

	FY82	FY83	FY84	FY85	FY86
($/M)	12.270	9.200	9.200	99.200	7.670
Procurement	144	108	108	108	90

Personnel Carrier, 6,009 are required, have 3,696 on hand, 2,313 short.

	FY82	FY83	FY84	FY85	FY86
($/M)	77.53	58.72	58.72	58.72	40.29
Procurement	610	462	462	462	317

(9) COMMUNICATIONS

Many types of communications equipment are in short supply. An extensive list filling several pages would be required to detail requirements for each item. A total procurement dollar figure for all types of communications items is $594,000,000.00.

	FY82	FY83	FY84	FY85	FY86
($/M)	154.000	120.000	120.000	120.000	80.000

(10) TOTALS

Totals shown by FY for the procurement requirements listed above.

	FY82	FY83	FY84	FY85	FY86
($/M)	718.48	581.57	570.24	430.13	376.74

C. AIR NATIONAL GUARD

1. SITUATION — 1980

a. FLYING UNITS

(1) **Conversions.** There were five aircraft conversions and four Primary Aircraft Authorization (PAA was formerly UE) increases in FY80. The conversions included OA-37, A-10, C-130B, F-4D and C-130H aircraft. The A-10's and C-130H's were new production aircraft.

(2) **Value of Aircraft.** The procurement cost of aircraft on hand in the ANG at end of FY80 was $3.7B, an increase of $300M over FY79.

(3) **Shortage of PAA.** All ANG flying units possess full PAA of aircraft with exception of one HH-3 helicopter at the 106th ARRG, Suffolk County ANGB, New York.

(4) **KC-135 Reengining.** The Congress in FY80 added $9.0M for a total of $15.0M to accelerate the KC-135 reengining program (also see READINESS section).

(5) **C-130H's.** The FY79 add-on of eight C-130H's were delivered to Jackson, Mississippi, ANG unit in July of 1980 (also see READINESS section).

(6) **A-7K's.** The rollout of the first A-7K two-seat combat capable aircraft occurred in

November 1980. Additional A-7K's for ANG units will become available in June 1981 (also see READINESS section).

(7) **30mm Gun Pod.** The add-on of $13.6M by the Congress for the development of the 30mm gun pod will enhance the combat capability of the A-7 aircraft.

b. Equipment in Support of ANG Units

(1) The largest accountable equipment item record account in the Air Force Equipment Management System is managed by the Air National Guard. The ANG's continuing conversion to more modern and sophisticated weapon systems has increased total authorized equipment items to 336,174 and dollar value to $1.6 Billion.

(2) The ANG vehicle fleet is the largest in the Air Force. It is equipped to 96% of its authorizations with 15,119 vehicles in the inventory. Total vehicle authorizations and dollar value are 15,818 and $355.0M respectively.

(3) The ANG Chemical Warfare Defense Equipment (CWDE) program has received nearly 5 million dollars since its inception in 1977. Virtually all units have received enough assets to commence training

THE NGAUS FIVE-YEAR ANG EQUIPMENT PROCUREMENT PROGRAM

AIRCRAFT

F-15 Interceptor to replace aircraft of ANG F-106 units at 20 aircraft per unit.

	FY82	FY83	FY84	FY85	FY86
($/M)		389.5	374.8	370.6	713.0
Procurement		20	20	20	40
Delivery				20	20
Units Equipped				1	2

F-16 Tactical Fighter to replace aircraft of one F-105G unit, and to replace aircraft of three A-7 units whose aircraft should be used to increase the PAA of the remaining A-7 units from 18 to 24, and to provide required BAI and attrition aircraft.

	FY82	FY83	FY84	FY85	FY86
($/M)	191.0	191.0	191.0	191.0	229.20
* Procurement	20	20	20	20	24
Delivery			20	20	20
Units Equipped			1	2	3

* Initial PAA at 18 — increase to 24 PAA procurement beginning FY86.

A-10 Tactical Fighter to increase PAA of A-10 units and to permit conversion of two additional units currently equipped with marginal equipment.

	FY82	FY83	FY84	FY85	FY86
($/M)	189.6	205.4	205.4		
Procurement	24	26	26		
Delivery			24	26	26
Units Equpped				1	2

A-7K Tactical Fighter — Continue procurement to meet requirement of 42 aircraft.

	FY82	FY83	FY84	FY85	FY86
($/M)	153.0				
Procurement	12				
Delivery			12		

C-130 Tactical Airlift — Replace aircraft of five C-130A units to include BAI.

	FY82	FY83	FY84	FY85	FY86
($/M)	121.5	111.4	101.3	101.3	101.3
Procurement	12	11	10	10	10
Delivery			12	11	10
Units Equipped			1	2	3

HHX Rescue and Recovery Helicopter. Replace antiquated aircraft of two HH-3 units in conjunction with modernization of USAF units.

	FY82	FY83	FY84	FY85	FY86
($/M)				51.8	51.8
Procurement				7	7

Aircraft will be delivered in FY87 and FY88.

KC-135 Reengining — Initiate three aircraft per month reengining program during FY82-FY86 to retrofit 104 ANG aircraft in conjunction with a program of reengining USAF Aircraft.

	FY82	FY83	FY84	FY85	FY86
($/M)	248.1	469.6	719.4	895.6	77.5
Kits Procured	9	24	36	35	
Deliver			3	30	36

	FY82	FY83	FY84	FY85	FY86
TOTALS ($M)	903.2	1,366.9	1,591.9	1,610.3	1,172.8

COMMUNICATIONS

Procurement of the following items of communications equipment will modernize ANG Tactical Control and Combat Communications units to the required level of combat readiness at the end of the delivery period.

For ANG Worldwide Rapid Deployment Force Units

	FY82	
TRC-97 Tropo Radio		
($M)	3.864	
Procurement (Units)	12	
SB 3614 Telephone Switches		
($M)	.05	
Procurement (Units)	2	
TSC-62 Tech Control		
($M)	.367	
Procurement (Units)	1	
GRC-171 UHF Radio		(when available will cost .08)
($M)	.08	
Procurement (Units)	10	
TOTAL ($M)	4.281	(total is 4.361 when GRC-171 becomes available)

Tri-Service Tactical Communications

	FY82	FY83	FY84	FY85	FY86	Total
Tropo Radios						
($M)	15.852	13.210	13.210	13.210	13.210	68.7
Procurement (Units)	12	10	10	10	10	52
600 Line Telephone Systems						
($M)	7.647	7.647	7.647			22.94
Procurement (Units)	1	1	1			3

EQUIPMENT: 14

Mobil Radio Control Centers			(when available)			
(SM)						16.0
Procurement (Units)						42
150 Line Telephone Systems			(when available)			
(SM)						*3.66
Procurement (Units)						3
Tech Control			(when available)			
(SM)						*12.0
Procurement (Units)						3
Comm Centers			(when available)			
(SM)						*7.92
Procurement (Units)						20
TOTAL (Tri-Tac) (SM)	23.5	20.9	20.9	13.2	13.2	*131.2

*when equipment becomes available

OTHER EQUIPMENT

Maintenance Shelters	FY82	FY83	FY84	FY85	FY86	Total
(SM)	1.649	1.649				3.3
Procurement	17	17				17
TSC-94A Satellite Terminals						
(SM)		9.9				9.9
Procurement		9				9
TSC-100A Satellite Terminals						
(SM)		37.4				37.4
Procurement		17				17
Region Operations Center For Hawaii Air Defense System Automation						
(SM)	15.0					15.0
Procurement	1					1
TPS-43E Radars						
(SM)	4.0					4.0
Procurement	2					2
TACS Modernization						
(SM)			52.0	52.0	50.0	154.4
Procurement			15	15	14	44
TOTAL (SM)	20.6	49.0	52.0	52.0	50.0	223.6
Totals (Comm) (SM)	48.4	69.8	72.9	65.2	63.2	*355.0
Grand Totals (SM) (Includes Aircraft & communications)	951.6	1,436.7	1,664.8	1,675.5	1,236.0	*7,058.0

*When communications equipment becomes available

AMERICAN ACADEMY OF PHYSICIAN ASSISTANTS

STATEMENT OF PETER D. ROSENSTEIN, EXECUTIVE DIRECTOR, THE AMERICAN ACADEMY OF PHYSICIAN ASSISTANTS

ACCOMPANIED BY CAPT. MIKE JOHNSON, REPRESENTING THE MILITARY

COMMISSIONING OF PHYSICIAN ASSISTANTS

Mr. ROSENSTEIN. Mr. Chairman, members of the committee, I would like to thank you for the opportunity to testify today on behalf of the American Academy of Physician Assistants. I will speak on the commissioning of physician assistants (PA's) in the uniformed services. As the most inclusive national association representing physician assistants, the academy facilitates the recognition of PA's as a profession, dedicated to the delivery of quality health care. The physician assistant is a member of the health care team who, working dependently under the supervision of a licensed physician, provides a broad range of health services.

The education of physician assistants in accredited programs encompasses training in biomedical, behavioral and clinical skills which are maintained by continuing medical education. The physicians' utilization of physician assistants creates a unique health care team dedicated equally to increasing accessibility to high quality health care, providing comprehensive health care services and maintaining an atmosphere of caring and trust among the patient, the family, and the health care team, and improving continuity of patient care within the health care system.

CONCEPT OF PHYSICIAN ASSISTANT

The concept of the physician assistant was born in 1961, when Charles Hudson, MD., in an article in the Journal of the American Medical Association, called for a midlevel health practitioner who could not only handle many routine procedures, but who could also take some degree of medical responsibility.

In 1965, the first program was launched at Duke University, with admission of four ex-military corpsmen to be trained as assistants to the primary care physician. There are now over 50 programs nationally graduating more than 1,500 physician assistants each year. These programs are accredited by the Committee on Allied Health Education and Accreditation on behalf of the American Medical Association.

MEMBERSHIP OF AAPA

The present membership of the American Academy of Physician Assistants includes more than 1,000 active duty and reserve military PA's, as well as about 6,000 civilian members nationwide. The uniformed services, the Army, Navy, Air Force and Coast Guard began PA training programs in the early 1970's. The first classes graduated in 1973. All personnel entering the program were from the enlisted ranks with a number of years of medical experience and training prior to beginning the program. Initially, graduates of the Air Force program were given a senior enlisted status upon graduation, whereas the Navy, Army, and Coast Guard graduates were promoted to a warrant officer rank.

After extensive study on both the overall effectiveness of the physician assistant and the proper grade structure, the Air Force began appointing PA's as commissioned officers in April of 1978. This Air Force decision was based on the fact that the duties and responsibilities of physician assistants were recognized as being equivalent to other commissioned personnel in the health care field.

Public acceptance and compliance, and the morale of physician assistants within the Air Force were greatly enhanced after this decision was made. Commissioning reflects the Air Force's confidence in the PA's capabilities and recognizes them as professionals.

GRADE STATUS

The principle of the commissioned officer grade status is supported by the Rand Corp., the American Academy of Physician Assistants, the American Medical Association, the Retired Officers Association, Fleet Reserve Association, Disabled American Veterans, and the Commissioned Officers Association of the Public Health Service. Commissioning status and pay for military PA's best compares to the starting salaries of their civilian counterparts. For example, $15,400 for second lieutenant is more comparable than warrant officer pay to a civilian PA's beginning salary of $19,000 to $20,000.

PAY SCALE FOR PA'S

Currently, Federal public agencies, for example, the Public Health Service and Veterans' Administration, offer title 38 classifications for pay to PA's allowing them to achieve GS 12, step 10—$35,033 per year. This pay scale is included in Public Law 94-103, October 22, 1975. Many military facilities now employ PA's working in a civil service capacity. They work alongside military PA's, physicians, and nurse practitioners; they pay scale authorized them is suitable to that of a full commissioned officer, not that of a warrant-officer.

In fact, a number of these PA's employed in a civil service capacity are ex-military PA's. After leaving the military and entering the civilian sector, they now receive full professional recognition and increased pay for their services. This situation has caused a great deal of frustration for military PA's who recognize the inequities of the situation but have no redress for corrective action.

COST EFFECTIVENESS OF PHYSICIAN ASSISTANTS

Separate Rand Corp. studies done for the Office of the Secretary of Defense and the Air Force indicate that physician assistants are cost effective. The level of patient acceptance for the commissioned physician assistant is greater because patients are more confident that they are receiving quality medical care from a true professional and not just a technician, which warrant officer status denotes. The Rand study has also shown that physician assistants can handle over 80 percent of primary care health problems. The utilization of physician assistants has allowed for more comprehensive medical care service, increased continuity and accessibility of care for military and retired personnel and their dependents. They are assigned to a variety of duty stations, both at home and on foreign shores; that is, major medical centers, branch clinics in remote areas, remote air bases, battalion aid stations, as assistant shipboard medical officers, and as members of the medical department on aircraft carriers. For the most part they perform their duties under the limited supervision of an assigned physician preceptor. The PA's evaluate and treat a variety of patients including active duty and retired personnel and their dependents, and civil service personnel. They stand duty in emergency rooms, work in general practice clinics, as well as specialty clinics. Commissioning of physician assistants in the Air Force resulted in a greater retention rate of PA's in the service.

RETENTION RATE FOR PA'S

It is our contention that greater retention of PA's will also, in the long run, enhance the retention rate of other military personnel who have had problems receiving quality medical care for both themselves and their dependents. This quality medical care provided by commissioned physician assistants, will result in the saving of millions of dollars for the Department of Defense.

STATUS OF NURSES IN PA PROGRAM

Another major facet of the issue of commissioning physician assistants in the uniformed service concerns nurses. Interestingly, nurses are commissioned officers, in the uniformed services and have been since World War I. The nurse who could enter the military as a commissioned officer now makes the decision to take 3 years of academic training to become a physician assistant. The nurse, now a PA, is no longer eligible to enter the military as a commissioned officer and a physician assistant.

Primary care, nurse practitioners, and physician assistants perform the same functions in the uniformed services. Nurse practitioners are granted commissioned officers status. The physician assistant should have comparable grade for comparable work performed.

ACTIVITIES PERFORMED BY PA'S AND NURSE PRACTITIONERS

The similar functions performed include routine physical examinations required to evaluate medical problems, ordering of appropriate laboratory studies, X-rays, electrocardiograms, and other special exams [tests], collection of specimens for pathologic examination including pap smears, and managing medical problems encountered in primary care clinics, which would include gynecologic problems. They perform minor surgical procedures, draining of minor lesions, would care and debridement, and suturing of minor lacerations. The physician and the nurse practitioner who perform these functions are commissioned officers. We ask then, should not the physician assistant be commissioned?

The physician assistant as well as the nurse practitioner analyze and interpret data, formulate problem lists, and establish plans for solutions of clinical problems with the concurrence of attending physicians. The physician assistant and nurse practitioners may write orders on inpatients and outpatients including medications which they are authorized to prescribe. Once again we ask, since the duties are the same, why should not the physician assistant be commissioned?

It is noteworthy to mention at this time that 96 percent of informally surveyed civilian physician assistant students indicate that they would not enlist if physician assistants were not commissioned. Conversely, 97 percent indicate they would consider a military physician assistant career if commissioned officer status were a possibility.

In summary, the experience of the Air Force with commissioned physician assistants has been a very positive one. PA's have proven cost effective. It has been shown that patient acceptance increases and that the retention rate of physician assistants in the Air Force has been increased.

We recognize that section 8067 of title 10, U.S. Code, provides the Secretary of each branch of the service with authority to determine what medical functions will be performed by commissioned officers. We believe that authority should be reinforced. We believe that commissioning must occur in all the uniformed services and strongly urge you to report legislation that would provide for full commissioned status of physician assistants in all branches of the uniformed services.

SPENDING RESTRICTIONS ON GRADE OF PA'S

The current spending restrictions with regard to the grade of military physician assistants has been continued despite committee language last year. We request your help and assistance in seeing to it that this restriction is immediately lifted so that the Air Force can be allowed to continue commissioning physician assistants.

We believe it would be beneficial not only to our own profession, which of course it would be, but would be beneficial to the military in the long run. We think it would be cost effective. We think it would help the retention rate of personnel. We believe strongly the commissioning of PA's in the long run will not be expensive but, as I said, will be cost effective. We would like to see the Air Force be allowed to commission again immediately, possibly have a study done by the General Accounting Office or someone else to prove to the other uniform services that commissioning does work so that they themselves can then decide under title 10 of the United States Code what they would like to do.

In the long run it will be beneficial.

On behalf of the American Academy of Physician Assistants, I would like to thank you for your time and once again for the chance you have given us to testify before you today. We offer our services in the future if we may provide more detailed information to you, Mr. Chairman, or any other members of the committee concerning the issue of commissioning or with regard to any issue concerning physician assistants.

Thank you.

Senator STEVENS. Thank you very much. We appreciate your statement, General.

Father Collins?

GEORGETOWN UNIVERSITY

STATEMENT OF FATHER T. BYRON COLLINS, S.J., SPECIAL ASSISTANT TO THE PRESIDENT OF GEORGETOWN UNIVERSITY

ACCOMPANIED BY FATHER HAROLD J. BRADLEY, S.J., ASSISTANT TO THE CHANCELLOR, GEORGETOWN UNIVERSITY MEDICAL CENTER

MEDICAL CENTER PROGRAMS

Father COLLINS. Good morning, Mr. Chairman.

Senator STEVENS. It is nice to see you.

Father COLLINS. We will be very brief. We have two areas of interest for which we would like to get the interest of the committee:

One is concerning our medical center.

We have a series of programs associated with both research and training in the Armed Forces. There is one point that we would like to make concerning the research program. There is a strong proposal on the House side concerning research, that it should be centralized and under one directorate.

We would like to propose that it be a coordinating element as opposed to a directorate.

We have at Georgetown a series of programs. One of them is a very good Navy research program. If you take one facet of the research, use the name, it is apt to be thought duplicative, but the experts in the field say that it is multifaceted; it is colloidoscopic, and a directive or directorate would be apt, if that were the only element for evaluation—to suppress research—that should be allowed to be mulitfaceted.

On behalf of the universities that are involved in this research program, we would like to recommend that the committee look at that point of view.

SCHOLARSHIP PROGRAMS AT GEORGETOWN

The second is in terms of Georgetown, itself. We have in our medical center a strong program for the students in the medical scholarship programs, Armed Forces scholarship program.

We have had a long history. We actually have 300 students in it. As you know, this is 1 year of service for 1 year of support of the student.

In the undergraduate we have a strong, and have had, a long history in the ROTC. We presently have 100 students. Even during the 1960's the university was active in keeping that alive, feeling an obligation to have commissioned officers out of ROTC from Georgetown.

Another program we have is the student exchange program, an international student exchange program.

We would like to propose that a pilot program be set up in terms of the Armed Forces programs in Germany. We have an exchange with eight universities in Germany. Students of Georgetown plus 80 other colleges in the Unites States exchange places. The cost of this is very minimal.

We would like to say that the ROTC program is a pilot program which could be oriented toward the needs of our Armed Forces in Germany. As you know, there are 1.5 million Americans in Germany. The capability of having students go there to study in universities as part of the ROTC and then be assigned there, would be, I think, from our studies, in association with the universities, a benefit to the student, for our Armed Forces in Germany, and the German people, because they live at the German universities.

HOSPITALS IN GERMANY

Second, in terms of the medical students, the Armed Forces have a series of hospitals in Germany. At present they don't have any residency program there. Because of the nature of our kind of university, we would like to offer that service of vesting and establishing residency programs that are oriented to the needs of our Armed Forces hospitals in Germany.

We would like to get the committee interested in this, because I think with relatively little money both programs could be done for the good of our program for our Armed Forces in Germany.

Senator **Stevens**. Have you discussed these programs with the Department of Defense?

Father **Collins**. Informally.

PROGRAM COSTS

Senator **Stevens**. Can you quantify them for us? What do they cost?

Father **Collins**. The ROTC program, the undergraduate program, I am almost hesitant to say, would be $75,000 to $150,000. It is not expensive, but it would be very effective because we could do it as a pilot program at Georgetown and get 80 other schools that had students who would be able to speak German and study at German universities, take their courses in the Armed Forces there from the existing military.

We already have the student exchange program, so the only thing would be the cost of setting up the students' cost of going to Germany and some administrative costs.

Senator **Stevens**. These would be ROTC students to begin with?

Father **Collins**. Yes.

In the medical center we would have to analyze that with the capabilities of the Armed Forces hospitals that are in Germany. We could set them upon affiliation with medical schools in Germany because of our association with the medical schools there. The people are there. What is needed is organizational effort at whatever cost that would be. I guess that would be $150,000.

Senator **Stevens**. We will ask the staff to take a look at it. I think the ROTC suggestion has a great deal of merit.

Do you have any questions, John?

Senator **Rudman**. Thank you very much.

Our staff will be in touch with you.

[The prepared statement of Father Collins follows:]

PREPARED STATEMENT OF FATHER T. BYRON COLLINS, S.J.

SPECIAL ASSISTANT TO THE PRESIDENT, GEORGETOWN UNIVERSITY

Mr. Chairman and members of this committee, I am Father T. Byron Collins, SJ., Special Assistant to the President of Georgetown University, Father Timothy S. Healy, S.J.

With me is Father Harold J. Bradley, S.J., Director of International Programs at Georgetown University, and Mary S. Albert, Assistant to the Chancellor of Georgetown University Medical Center, Matthew F. McNulty, Jr., Sc.D.

We wish to present information in three areas: 1. Armed Forces Health Student Scholarship program; 2. Special Research Project at U.S. Universities; and 3. Reserve Officer Training Corps at U.S. Colleges and Universities (ROTC).

The Armed Forces Health Scholarship program is a successful health manpower resource. In this program, a medical student receives tuition and fees, and a living stipend, paying income tax on the living stipend. For each year of support, after completion of training, a student gives a year of service in the Armed Forces.

Georgetown University has actively supported this program among our students. We presently have over 300 students in this program distributed across the three services.

We recommend to this committee that an excellent way to obtain greater value from this program would be to have the appropriate DOD officials investigate a pilot program for the Armed Forces in Germany, whereby students might go to Germany and serve in Germany for electives in their clinical or residency years. Georgetown would have an excellent capability for this since we could develop a special German language and cultural program for these students within the Schools of Languages and Linguistics, and Foreign Service.

The second matter we wish to address concerns the specific capability of Georgetown University Medical Center in biomedical research.

Georgetown University has a joint program with the military in treatment of irradiation casualties and in treatment of individuals exposed to organophosphates (chemical warfare agents). Because of our proximity to the Pentagon and because of Georgetown University's relationship with Veterans Hospital, Walter Reed, Bethesda Naval Research Center, and our network association with NIH and other universities, Georgetown plans to expand its research capabilities and program with the Armed Services, in the ongoing research cited above and on such subjects as vaccines, treatment of gonorrhea, tropical disease, and the role of prostaglandins in injuries sustained by military casualties. We therefore urge full funding of the biomedical resarch (as in the present proposed budget) we fear that the constant-dollar amount of research will be reduced, threatening post-doctoral research. New young investigators will face greater competition in getting started, thus reducing our cadre of research scientists. Our biomedical research is a precious resource and must not be threatened.

We understand the House is eager to consolidate research at the DOD level. We appreciate their concern about overlapping research but we wish to state that in our experience, different avenues of research are quite different, and the research, in fact, is not duplicative. A coordinating mechanism among the three services seems to us to be much preferable to centralized DOD research decision.

The third matter relates to the Army ROTC program. In national ROTC programs there are about 240 colleges and universities, about 100 of these in the Eastern States. The total number of ROTC Army cadets is about 69,000 to 70,000 with 24,000–25,000 in the Eastern Region I. Georgetown is a D.C. university area center for this program. There are approximately 175 students in the center, 100 of them Georgetown students.

We recommend the investigation of a pilot program for students to study in Germany as a part of the International Student Exchange program. U.S. students would study in German universities and learn to speak German fluently. Their ROTC curriculum would be satisfied through a combination of self-study and attendance at a three- to four-week course that would be administered centrally by the Army at one of its installations in Germany. Upon college graduation, these students would serve as commissioned officers in the Army, better equipped to fit into the language and culture of Germany in the event they should be stationed there. The unit cost of such a program would be minimal as compared to the societal benefits that would accrue to the Armed Forces, the German people, and the United States in general.

U.S. COUNCIL FOR AN OPEN WORLD ECONOMY, INC.

STATEMENT OF DAVID J. STEINBERG, PRESIDENT, U.S. COUNCIL FOR AN OPEN WORLD ECONOMY, INC.

"BUY AMERICAN" REGULATIONS

Senator STEVENS. Next is Mr. David J. Steinberg, president, U.S. Council for an Open World Economy.

Mr. STEINBERG. Good morning, Mr. Chairman. I am David J. Steinberg, president of the U.S. Council for an Open World Economy.

The council is a private, nonprofit organization engaged in research and public education on the merits and the problems of achieving an open international economic system in the overall public interest.

The public interest is the council's only standard.

Our concern in these hearings, Mr. Chairman, is with the "Buy American" regulations affecting defense procurement. We believe that these regulations, which have gone on for many years in many forms, require reform and to the extent possible they ought to be removed unless, each year, these strictures are found to be essential to the national interest and especially to the national security interest.

There are many "Buy American" regulations. As you know, there is fundamentally the Buy American Act supplemented in 1962 by an executive order that gave a 50-percent advantage to American suppliers. That was almost 20 years ago. Before that there was a special "Buy American" regulation affecting procurement of textiles. After 1962—and I am referring to the early 1970's—there was a statutory "Buy American" stricture affecting procurement of articles that contain specialty metals.

SPECIAL INDUSTRY REGULATIONS

There are also other special industry "Buy American" regulations. There are many exceptions to these, exceptions negotiated by international trade agreements and exceptions that have been the subject of waivers by the Congress for NATO purposes.

But there still remain many "Buy American" regulations. All of these, in our view, add up to a policy hodgepodge. These requirements are not components of a coherent, well-designed "Buy American" policy affecting defense procurement. There is no periodic reassessment of these regulations in the interest of sound policy formation and of the most efficient use of financial resources in this major sector of the Government budget. Nor is any "Buy American" requirement concerning products of specific U.S. industries related in any way to coherent policies addressing the real problems and the real needs of these industries.

For example, there is no coherent, comprehensive textile policy in which the "Buy American" stricture on textiles is only one component. There is no coherent specialty-metals policy in which the "Buy American" stricture on specialty metals for defense procurement is only one component. Nor does the Government appear to know what these "Buy American" regulations cost, what their value is to the strength of these industries, how long these measures should last and if there are any alternatives or supplementary measures that merit adoption.

It seems to us, Mr. Chairman and Senator Rudman, that easy recourse to import restrictions tends to divert attention from the tougher, more responsible task of carefully diagnosing the real problems of these industries to determine if they do indeed need Government help and what is the best form of Government help.

It is, if you please, a form of policy laziness that we can no longer afford, involving costs that get higher as years pass and as the need for policy perfection grows more urgent.

A substantial increase in the defense budget this year and for the next few years certainly makes these reforms all the more necessary.

Now, in spite of these criticisms of this pattern of "Buy American" regulations affecting defense procurement, I am not advocating the immediate termination of these regulations. There is a right way to impose such strictures and there is a wrong way. There is a right way to remove them and a wrong way.

In our view, to abruptly remove them would be the wrong way because the affected industries should be on notice for a reasonable period of time as to the Government's intention and be in a position to plan for this particular contingency.

What I am suggesting, respectfully, to your subcommittee and to the Senate is that in preparation for fiscal 1983 the Congress ask the Secretary of Defense or ask the President to report to the Congress on the need for "Buy American" regulations affecting defense procurement, what pattern would be most constructive, most helpful, to the total national interest and particularly the national security interest, what these strictures cost the country, what the cost would be if they were removed, and what additional measures are being taken and should be taken to help these particular industries, the specific industries that have been given a special advantage in the "Buy American" regulations.

In other words, there is need now, there has long been need, for careful congressional and executive branch probing of these regulations. Too much time has gone by without such careful assessment of these rules.

That, Mr. Chairman, summarizes my statement.

Senator **Stevens**. Thank you.

Senator Rudman?

Senator **Rudman**. No questions.

Senator **Stevens**. There are no questions. Thank you very much.

[The prepared statement of Mr. Steinberg follows:]

PREPARED STATEMENT OF DAVID J. STEINBERG

U.S. Council for an Open World Economy

(The U.S. Council for an Open World Economy is a private, non-profit organization engaged in research and public education on the merits and problems of achieving an open international economic system in the overall public interest, the Council's only standard.)

Congress and the Executive Branch for too long have neglected reform of the disjointed array of Buy American requirements affecting defense procurement. Combatting inflation and finding real solutions to the real problems of ailing industries and among the aims of such policy overhaul.

These procurement strictures consist of (1) the Buy American Act (affecting government procurement across the board), supplemented by a 1962 executive order giving a 50 percent advantage, for balance-of-payments purposes, to domestic suppliers in defense procurement, and (2) an assortment of more-restrictive rules, established by Congress, mandating procurement of certain products from domestic industries alone (except for extraordinary circumstances). The best known of the specific-industry mandates involve textiles and products containing specialty metals, including stainless steel (and stainless steel flatware per se).

Some products have been exempted from the general buy American stricture by the recently negotiated multilateral trade agreement, others by Congressional waiver in the interest of NATO standardization and interoperability. In addition, the Department of Defense obtained Congressional authority to purchase certain textile products, and certain products containing specialty metals, from foreign sources in the interest of these NATO objectives. Buy American strictures of one kind or another still apply, however, to a considerable number of products purchased by the U.S. defense establishment. These "sacred cow" subsidies need probing.

LACK OF COHERENT INDUSTRIAL POLICY

The authorizations under which these advantages are extended to domestic industries are a policy hodgepodge. The requirements are not components of a coherent, well-designed Buy American policy affecting defense procurement. There is no periodic reassessment of these strictures in the interest of sound policy formation and the most efficient use of financial resources in this major sector of the U.S. government's budget. Nor is any Buy American requirement concerning the products of specified U.S. industries related in any way to coherent policies addressing the real problems and needs of these industries. For example, there is no coherent textile policy of this description, of which the Buy American requirement on textile products is a part; nor a coherent specialty-metals policy, of which the Buy American requirement on products containing specialty metals is a part. Nor does the government know what the Buy American strictures in defense procurement cost, their value to the strength of these industries, how long these measures should last, and if there are any alternative or supplementary measures that merit adoption.

Instead of coherent, cost-efficient strategies addressing the real problems of industries meriting government help, we have simplistic, costly concessions to political pressures for government protection against foreign competition—and retention of these measures year-in and year-out, no matter the need for an all-out effort to solve industrial problems, increase industrial productivity, reduce subsidies, combat inflation and use most efficiently and productively the funds provided by American taxpayers. To the extent these industries are essential to national security, there is all the more reason to deal incisively with their real problems. Subsidizing such industries through the Buy American requirements now in effect is bad economics, shabby politics and badly conceived attention to the mobilization base. To the extent these industries need government help, such assistance should take the form of adjustment strategies designed to so strengthen these sectors of the mobilization base that these industries might become viable without barriers against foreign competition (assuming they are not in this condition now). To the extent that any of these industries cannot survive without import barriers of some kind, yet must be preserved for legitimate national-security purposes, the American people have a right to know how, and how effectively, these import restrictions are helping to cure whatever problems warrant such government aid, and at what cost to the taxpayer.

Easy recourse to import restrictions tends to divert attention from the tougher, more responsible task of carefully diagnosing the real problems and needs of industries that may need and merit government help. It is policy laziness we can no longer afford, involving costs (financial and otherwise) that get higher as years pass and as the need for policy perfection grows more urgent. The substantial increase in the defense budget makes these reforms all the more necessary.

PLAN NOW FOR FISCAL 1983

I am not asking that any of these Buy American strictures be terminated immediately. To remove them abruptly, without adequate preparation within the policy framework suggested above, would not be in the national interest. I do urge that, this year, in preparation for the Fiscal 1983 defense appropriations bill, Congress ask the President to reassess the Buy American requirements with a view to (a) determining the extent to which they are needed, (b) indicating other steps being taken or that should be taken to strengthen these industries within the framework of a coherent adjustment strategy, and (c) reporting the cost of such an assistance program, including the Buy American requirement per se, in financial and other terms.

Here is an important opportunity for the Administration to launch an "industrial policy" with national-security implications—a policy that addresses the real problems of ailing industries, phases-out subsidies that may no longer be needed, lowers the cost of national defense and aims at the higher productivity so essential to America's international competitiveness. The Administration, in fact, should undertake these reforms whether or not Congress requests them. No movement along these lines is under way in the Defense department. Nor has the Office of Management and Budget responded to the letters I have sent OMB urging such policy overhaul.

Twenty-two years ago, the government imposed quotas on imports of petroleum in the supposed interest of national security. It did so without a coherent petroleum policy. The national-security clause of the trade legislation, under which these controls were imposed, did not require (and still does not require) such policy coherence, with systematic review of the policy's progress. That ill-considered, ill-fated approach to such an important issue is an important part of the story of national neglect, indeed national negligence, in the energy field. Isn't that import policy debacle enough of a lesson on the deceptions and dangers of simplisitically using import controls to remedy alleged industrial weaknesses? When will government ever learn?

NATIONAL TAXPAYERS LEGAL FUND

STATEMENT OF DINA RASOR, PROJECT DIRECTOR, PROJECT ON MILITARY PROCUREMENT, NATIONAL TAXPAYERS LEGAL FUND

TAXPAYER VIEW OF MILITARY BUDGET

Senator **STEVENS**. Dina Rasor, project director of Project on military procurement.

Ms. **RASOR**. I would like to introduce my assistant, Donna Martin.

Senator **STEVENS**. I don't know if you heard my comment at the beginning. We do have a very long list of witnesses. We will request you summarize your statement in 10 minutes.

Ms. **RASOR**. Once again, my name is Dina Rasor. We are from the project on military procurement, which is a project of the National Taxpayers Legal Fund.

We have started looking at the military from the taxpayer point of view. We want to see how much we are paying for it; does it work, and will it win the next war?

We also want to see who benefits from increased defense spending. We want to make sure the taxpayer gets his money's worth.

So we began to look at several projects. Our short-term goals are very simple—to bring spending abuses and ill-conceived weapons out in the open, and our long-term goal is to reform the military system so that we consistently get good, effective, reliable, and low-cost defense.

M-1 TANK PROGRAM

So, for our first program we started to look at the M-1 tank. We have not picked this because we want to pick on the Army or because we are antitank. We want to show this is an example of how not to proceed with procurement.

I want to make it very clear that tanks are important. The U.S. Army must buy tanks. We must have tanks that work. They are very crucial weapons. This is potentially a $20 billion program and it is not a matter to be taken lightly.

Now, we have been looking at the M-1 tank. I think many people realize that the cost has risen. It went up $1 million last year per copy, which, multiplying that by 7,000, is over $1 billion.

Because of the high cost growth, the Carter administration decided to accept less tanks than what they paid for. They wanted to buy in fiscal year 1981, 569 tanks, accept 360; pay for 720 tanks in fiscal year 1982 and accept 569.

The Reagan administration asked for a $1 billion boost these 2 years to keep tank production up to what we are supposed to buy.

We see a problem. The problem is, the higher the cost goes, the less we will buy. The more complex the weapon, the more likely they are to break down. It means less to take to the battlefield where it really counts.

Even though the money is going to be appropriated for 720 tanks this year for fiscal year 1982, it really is beginning to look like they are not going to make that production level. The Army, in hearings that were conducted by the subcommittee on Defense in the House, said they had a 70-percent chance they would make the 1982 production level. When pressed further, they said it was not based on statistics but on confidence of the Army after reviewing the Fort Hood tests in progress.

Now, the Army got delivered 7 tanks in March 1981, out of the 30 required. The most recent figures show in April they received 14 tanks out of 30 required; in May they received 17 tanks out of 30 required. Those 3 months we were supposed to get 90 tanks. We ended up with 38.

One of the problems is an engine problem. It is being refurbished, supposedly, at no cost to the taxpayer. The Army is pretty sure they are going to make the production. A lot of people doubt that. It does not look like we are going to get 720 tanks this year, which means, once the money is appropriated we may end up accepting less tanks for the money.

One of the things that worries me about that is that everyone is upset about the NATO inferiority in tanks and number of tanks. The high cost and low production rate of the M-1 is going to institutionalize this. If we rely on this weapon system when we get into a war, it is going to be very hard to try to keep up with our tank production.

One of the reasons is the great technical problems with the tank.

RELIABILITY OF M-1 TANK

Going to the reliability, I am sure most of you are aware of some of the stories that have come out. The General Accounting Office did a report in January of last year. They are ready to come out with a new report on the tanks.

There are several areas where the Army has set requirements for tanks and they have not met the requirements. One is track life. A 2,000-mile requirement, 900 miles, is the best to date.

Power train durability, that means how many tanks will show up on the battlefield when you go on the march. Right now, the figure in April is 22 percent surviving a 4,000-mile march without power train overhaul, the Army requirement. It slipped to 19 percent in March.

Now, the Army claims as of April 1981 the figure is 27 percent, still almost half of what their requirement is. This is not a requirement by anybody but the Army itself.

Cruising range—the requirement for the cruising range was 275 miles; however, the operational cruising range has only reached 130 miles because of excessive fuel consumption. According to the results of the April 1980 FSED test, the tank was achieving 4 gallons to the mile at 10 miles per hour.

I could go into a lot of other problems with the tank in more detail. We realize this is a new system and there will be problems.

One of the things that concerns us, too, is the lack of test equipment. Test equipment is not working. They had to do alternative tests. Some tanks are being delivered without having certain tests done. How are you going to make sure the tanks work? You have to look at them from the fact we may be in a war situation. If these tanks are being delivered without calibration, we are going to have trouble.

The big thing that has come out most recently is logistics. GAO is going to be releasing a report saying this is a big problem.

TRUCK PROCUREMENT

I have listed here how many trucks we are going to have to buy extra for each battalion just to counteract the gas mileage problem. The cost is approximately one-half million dollars per tank. That does not include getting the trucks over there, increased personnel problems, maintenance and support costs. There are a lot of hidden costs to the taxpayers for this excess fuel consumption.

The track life also is a problem. One of the things about the M-1 tank was that it was going to be easy to maintain. The semiannual support maintenance at Fort Knox is 100 to 130 man-hours. The goal is 40 man-hours.

The Army admits they are going to have to "hand-manage" the next year and a half the logistics problem. Logistics was given a low priority, as admitted by General Meyer, in favor of maneuverability and other hardware priority. We have gone over that one to point out battlefield reality that we have to talk about here. That has to do with production rates, cost, logistics, and reliability.

What is most important about these test numbers is what it is going to mean to a soldier in combat. One of the things for which the Army justifies the high cost of the M-1 tank is the increased armor protection and maneuverability of tanks; however, if the power train fails or the tank runs out of fuel, this technology is totally useless to personnel on the battlefield. If you can't get it to run, if you can't produce numbers where the battle is going to be, if there is a maintenance problem or engine or fuel problem, it does not matter how many we have sitting in the depot.

If the M-1 throws or breaks a track, an advanced fire extinguisher will not help the soldier.

In the FSED April 1980 test report done at Fort Knox, maintenance on a track failure took from 0.3 to 24.3 hours to fix. Needless to say, during this maintenance time the crew is extremely vulnerable. The Army's low priority for logistical support and reliability may be fatal to the soldier in the field.

You have heard about the air cleaner problems. When you go 75 to 100 miles, according to the test, someone has to get out of the tank, go over to the air filters, lift them out, clean them and put them back in. It is not going to be easy to do in a hostile environment.

SPEED OF M-1 TANK

One thing that I think is very interesting is the Army claims that the M-1 is the fastest tank in the world. I have seen the dragstrip race that the Army often puts on for spectators and the press, and it is quite dramatic. The M-1 leaves the M-60 in a cloud of dust as it zooms past.

However, wars are not fought on dragstrips. The operational mobility of the tank is what counts; in other words, going from point A to point B, a 50-mile march. Because of the lower reliability and high fuel consumption, this tank is actually the slowest in the world in this type of operation.

ADVANCED TECHNOLOGY IMPROVEMENT

The advanced technology improvement is something I would like to kind of verify. They say advanced technology is better than simple technology. The most advanced technology is simplest solution; complex technology means logistics problems; it means down time. I have given a couple of examples where other countries have changed their tanks.

Right now we have a cupola in the tank with a power-driven machinegun. When the Israelis get this tank with our power-driven machinegun in the M-60, they rip it out and put in a simple ball and joint. They realize it is impossible. The actual motorized system does not help the soldier.

The Army is also proud of the new ammunition that the M-1 has to protect the crew from ammunition explosions; however, this heavily armored box is reachable only through heavy armored doors that are operated by hydraulics. If the hydraulic system fails—as it has done in tests—the crew may not be able to reach the ammunition.

The British have introduced in their tanks a double-walled ammunition box that is surrounded by water. If a shell hits and penetrates the wall of the box, the ammunition is flooded with water to prevent a fire and explosion.

These two examples point out how simple solutions may help the soldier in battlefield better, and more consistently, than the costly advanced technology solutions. It is a simpler technology. In the long run it may be more realistic. If the soldier thinks he has a chance of not getting into the ammunition, he will probably leave the doors open.

What we are interested in looking at is that we need tanks and we need more. It is important but the fact is you have to make sure if we go to war that tank is going to work.

What is important is the fact that it does not matter whose fault it is; when it fails on the battlefield, it fails. So we are happy to see that the Senate Armed Services Committee took an important step with the M-1. In the committee report they called for the following tests on page 6: These tests test the tank in a true combat type situation:

One of the things that I think is very important, it includes live-fire tests of tanks fully combat configured with ammunition and fuel. Right now we shoot from an empty hull. We take out the fuel and hydraulic system fluid.

What we need to do is take one out fully combat configured and shoot. That is what counts on the battlefield. The kind of theory of trying to figure out whether it is going to work or not through computer modeling, shooting through the hull, is not a battlefield situation.

They talk about using competition among several design teams to help develop the M-1. Right now, as it stands it is a lot of high technology things that look good on paper but are not working on the battlefield.

FIRE SYSTEM

The fire system is a very important part of the tank. When it came down to it in 1977, we had a shoot-on-the-move test against the Leopard II/Sherman tank. The M-1 won the test. We found out that the gunner had turned off the stabilization system and had eyeballed it in the old fashioned way and won the test against the Germans who were supposed to have a more sophisticated stabilization system.

I have come up with some rough estimates: Maybe a fourth of the cost of the tank goes to put in the fire control stabilization. Soldiers in the Fort Knox test asked for an option to stabilization. It is permanently on now. They asked for an option. In the heat of the battle you are going to have to rely on your gut instincts.

The high technology is a nice goal if it works, and if it works consistently. The hydraulic system fails often. The Army has asked for improvement programs. We have not gone to full production yet and they have asked for an improvement program. They ask for $800 million. After 300 tanks they began to reinforce the armor.

We think the taxpayers at this point should not be asked for improvement money when we have not gone into full production. A lot of people say we have to have tanks. If that is true, the Army is not acting in a way that is going to help that tank shortfall.

TANK SHORTFALL

We often hear concerns expressed about the complexity and high cost of the M-1 program, but these concerns are pushed aside by the specter of a serious tank shortfall. Because the Army has allowed such severe setbacks and a slower pace in the production of the M-1, they cannot be that concerned with a shortfall.

One simple way to prevent a tank shortfall is to keep the M-60 production lines open. For the price of one M-1 we can afford three M-60's. M-60's can be produced at 1,250 per year, versus the current goal of 720 for the M-1. If the Army allows the M-60 lines to be shut down in a few years in favor of the M-1, we will be institutionalizing a shortfall of tanks.

The bulk of Soviet tank battalions consists of the T-62. Some experts believe the M-60 is even comparable to the T-72. Pushing the M-1 program forward despite its several problems means a waste of money for the taxpayer.

One of the things they ask is to simplify the manual, because people could not understand it. To people with less educational skills, that can be fatal in a battlefield situation. If the Congress is still concerned about tank shortfall, they don't think the M-60 is good enough, Teledyne-Continental Motors has made a kit. I don't vouch for it. It has a 1,500-horsepower diesel engine and other improvements. It claims to be under one-half million dollars a copy. Take a look at what they call Super M-60 to see if it works. It gives you an option of not being forced to field the M-1.

TANK REFURBISHMENT

Refurbishing tanks has been done successfully in the past. General Abrams successfully refurbished 1,500 M-48 tanks that proved to be as effective as the M-60.

The M-1 tank is currently a very poor investment for the taxpayer. The committee should carefully consider all options before committing appropriations this year for 720 M-1's. The slump in the production rate, low reliability, and dubious effectiveness in a real battle situation raise serious doubts as to the effectiveness of the M-1 program for our national defense.

We need to look it over. It does not mean you have to cancel it, but you do have options to look at.

Part of what I call the producement disease, increasing technology, low effectiveness, high cost. If you look at the F-14, the F-15, the F-16, the F-16 has the lowest cost, has the highest number of them ready for a mission at any one time and whipped the F-15 in the test with fewer hours of training.

The F-14 was whipped by the F-5, which is a very simple, cheaper plane, better than 1 to 1 exchange ratio.

Fascination with high technology is not going to win the next war. What will win it is logistics—support, training, and weapons that work consistently.

MISSILE SYSTEMS

Missiles—the Sidewinder is a very simple missile, twice the kill ratio of the more complex Sparrow missile, yet the 30-millimeter gun mounted on an A-10 has twice the number of kills of the Sidewinder; it is a lot cheaper. We are trying to push too fast, too far, with technology before we have it going to work. You should not push the state of the art on the battlefield. People will lose their lives unnecessarily.

We can't afford to indulge our fascination with unnecessary complexity and high cost. I am not antitechnology. I want technology that works, that works consistently. That does not always mean the most complex. Often it means the most simple ideas. Tactical training and logistic support are very important. What we need to do to stop this kind of thing—the M-1 tank is an example—we need closely monitored tests. We need to enforce the contract to prevent cost overruns and to prevent low procurement rates. Enforce the contract like any body else does in the free enterprise system. If you do not meet your contract, you lose.

Defense contractors do not lose if they make a mistake. The longer they can draw out the production, the more money they can get in the long run.

INCENTIVE PROGRAMS

Incentive programs—you have to have incentives in the defense contracting business. Also, you have to have the courage to cancel programs that don't work. Everything that comes on the drawing-board is not a good idea. Only the cream should rise to the top, not the entire milk. We can't afford it. We want to have a good defense. The taxpayer pays for this and especially the soldier who risks his life.

Thank you.

[The prepared statement of Ms. Rasor follows:]

Project on Military Procurement

PREPARED STATEMENT OF DINA RASOR

Mr. Chairman and members of the Committee, thank you for the opportunity to appear before the Subcommittee on Defense.

The Project on Military Procurement is a project of the National Taxpayers Legal Fund, a non-profit, tax-deductible organization. We are examining defense spending to see if the American taxpayer is gaining increased security for his defense dollar. The Project is taking a serious look at HOW the defense money is being spent, WHAT we are getting for that money, and WHO IS BENEFITING from large defense expenditures.

The Project's short term goal is simple: to bring spending abuses and ill-conceived weapons systems to the public and the Congress' attention. Our long term goal is far more complicated, but essential: to reform the military acquisition system to produce effective, reliable, and less expensive national defense. You may find our list of objectives in Appendix I.

We have recently been examining the Army's M-1 Abrams tank. We chose the M-1 tank becuase we believe that it is a good education example of how not to procure a weapons system. The M-1 problems are not unique to the Army, and I would like to compare the tank to other weapons that suffer the same procurement disease.

Ever Rising Costs

In the final quarter of 1980, 47 weapons systems rose 47.6 billion dollars in total costs. The M-1 tank was one of the top three programs that had the highest increases. From January 15, 1980 to January 15, 1981, the cost of the M-1 tank rose one million dollars per copy (from $1.5 to $2.5 million per copy).

Because of this high cost growth, the Army planned to accept less tanks than the taxpayer has paid for. The January budget request reflected the Carter administration's intentions to pay for 569 tanks, yet accept 360, and pay for 720 tanks and accept 569. Almost a billion dollar boost was provided for in the Reagan budget to meet the planned production figures for FY 81 and FY 82.

Even though more money will be appropriated to keep the tank production at its projected level, there are doubts raised that the Army will be able to meet its production goals for the next two years. In hearings held by the House Appropriations Subcommittee on Defense in April, the Army claimed that it was 70% sure that the FY 82 production level would be met. This estimate was not based on Army statistics but rather on the confidence of the Army after reviewing the Ft. Hood tests in progress.

During the Army's testimony it was admitted that only 7 tanks out of the required 30 were delivered in March, 1981 and that 31 tanks were currently sitting at the Lima plant undelivered because of lack of engines. It will be difficult under the current conditions for the Army to make 720 M-1's per year. On the average the Army could produce approximately 1250 M-60's per year. The M-1 is also approximately three times more expensive as the M-60 at similar production rates. The high cost and low production rate of the M-1 tank will institutionalize the NATO inferiority of tanks if the M-1 becomes the only U.S. Army tank in production.

M-1 Reliability

As of April this year, the Army admitted the M-1 will not meet the Army's own requirements in the following areas:

- Track Life -- The Army required 2000 miles of track life yet the best figure to date is 900 miles.

- Powertrain Durability -- The Army requirement was that 50% of the M-1 tanks go 4000 miles without a powertrain overhaul. In April, 1980 the figure was reported at 22%. At that time the Office of the Secretary of Defense informed the Congress that they were satisfied with the RAM-D (Reliability, Availability, Maintainability and Durability) of the tank at that point in testing. In March, 1981, the figure dropped to 19%. As of April, 1981, the Army claims the figure is now at 27% and does not foresee meeting the requirement anytime soon.

- Cruising Range -- Requirement for the cruising range was 275 miles, however, the operational cruising range has only reached 130 miles because of excessive fuel consumption. According to the results of the April, 1980 FSED test, the tank was achieving 4 gallons to the mile at 10 miles per hour.[1]

The April, 1980 FSED report also points out many other problems with the tank. A list may be found in Appendix IV.

The Army remains optimistic about the effectiveness of the M-1 tank despite the fact that tanks are being accepted without the planned tests because of a lack of test equipment. The Army claims that alternate tests and other techniques are being used to determine if the tank is meeting its specifications.

Supporting the M-1 in Battle

The Army has recently revealed that a mandated Integrated Logistic Study (ILS) has not been done for the M-1 tank due to "cost constraints and limited sources."[2] However, it is known that because of the excessive fuel consumption and low reliability each tank battalion would have to add the following equipment:

6 Five-ton trucks
1 Semi-tractor truck
1 5000 gallon petroleum trailer
6 One and one half-ton cargo trailers
6 tank plus pump units
6 600 gallon pods

Total cost to taxpayer per battalion -- $632,800 (not counting transportation costs, support costs, and manpower costs).

The shorter track life will cost the taxpayer $14,090 per tank per year. The maintenance on the tank is also higher than expected. According to findings during the test at Ft. Hood for peacetime operation, in armor units today the M-1 maintenance is 1.58 maintenance man-hours per operational hour. The semi-annual maintenance at Fort Knox is 100-130 man-hours versus the goal of 40 man-hours.

Concerns about the enormous logistic problems have been expressed in several public reports. In 1979, a U.S. Army Logistics Evaluation Agency report said the logistics support for the M-1 had been based on the assumption that the M-1 would demonstrate substantially better RAM-D characteristics than the M60AI PI.[3] However, as of 1979, test results showed that the M-1 was requiring an unscheduled maintenance action about seven times more frequently than the M60AI PI. Therefore, logistic requirements for the tank at that time were grossly understated. The report continued to list many areas where the M-1 maintenance and logistics were underestimated. (See Appendix III.)

In February of this year, Congressman Jack Edwards' staff member, Charles Murphy, warned that the lower than expected track life and the excessive fuel consumption will have a significant impact on the logistics support of the M-1.[4]

The General Accounting Office will soon release a report that also raises serious doubts about logistics of the M-1.

The Army admits that the logistics for the tank will have to be "hand managed" for the next one-and-a-half years and that logistics was given a low priority in the program. The Army concludes that this "tradeoff" was made in favor of maneuverability and other hardware priorities.

Battlefield Reality

I have given you a host of old and new problems with the M-1 tank that include production rates, cost, logistics, and reliability. What counts most is what these test numbers mean to the soldier in a combat situation. The Army justifies the high cost of the M-1 by pointing to the increased armor protection and maneuverability of the tank. However, if the tank's powertrain fails or if the tank runs out of fuel, this technology will be useless in the battlefield.

When the M-1 throws or breaks a track, an advanced fire extinguisher will not help him for long. In the FSED April, 1980 test report done at Fort Knox, maintenance on a track failure took from .3 to 24.3 hours to fix. Needless to say during this maintenance time the crew is extremely vulnerable. The Army's low priority for logistical support and reliability may be fatal to the soldier in the field.

The Army claims that the M-1 is the fastest tank in the world. I have seen the dragstrip race that the Army often puts on for spectators and the press, and it is quite dramatic. The M-1 leaves the M-60 in a cloud of dust as it zooms past.

However, wars are not fought on dragstrips. The operational mobility of the tank is what counts, in other words, going from point A to point B - a 50-mile march. Because of the lower reliability and high fuel consumption this tank is actually the slowest in the world in this type of operation.

The M-1 has many "advanced" technology improvements where other countries have found "simple" technology solutions. The tank commander machine gun has been said to be almost impossible to control because the power driven cuppola.[5] The Army does not plan to change this system. The Israeli Army upon receiving a M-60 tank, removes the cuppola and replaces it with a free swinging mount for their machine gun.

The Army is also proud of the new ammunition that the M-1 has to protect the crew from ammunition explosions. However, this heavily armored box is reachable only through heavy armored doors that are operated by hydraulics. If the hydraulic system fails, (as it has done in tests) the crew may not be able to reach the ammunition. The British have introduced in their tanks a double walled ammunition box that is surrounded by water. If a shell hits and penetrates the wall of the box the ammunition is flooded with water to prevent a fire and explosion. These two examples point out how "simple" solutions may help the soldier in battlefield better, and more consistently, than the costly "advanced" technology solutions.

The Senate Armed Service Committee took an important step to see if the M-1 is really going to be effective in the battlefield this year in its authorization report. The Committee report (not the bill) calls for for the Secretary of the Army to report a plan by January, 1982 for the following tests for the M-1:

> - Side-by-side tests of the M-1 with other tanks, both U.S. and foreign, in field exercises. These exercises should closely simulate actual combat employment of tanks to obtain a real-world assessment of M-1 operational capabilities and shortcomings relative to those of other first-line tanks (such as speed and durability during a long-distance road march on secondary roads, off-road mobility when under attack and performance as a machine-gun platform during an attack). These tests should be structured to determine those changes in the M-1 that are most urgently needed to improve its operational effectiveness.
>
> - Comprehensive vulnerability tests: (1) to include live-fire tests of tanks fully combat-configured with fuel and ammunition and (2) to determine the shortcomings of the current M-1 that most directly threaten survival of tank crews when the M-1 is hit and penetrated by hostile fire.
>
> - A process through which evolutionary development of the M-1 can best be achieved, preferably through competition among several design teams and through design, development and tests of evolutionary prototypes based on the M-1 design.[6]

We advise that this committee will mandate these tests so that the Congress and the taxpayer will be sure that this is the most effective tank procurement for the money.

Improvement Plan

The Army is already asking for improvement program money for the M-1 tank. Part of the plan is to upgrade the armor protection of the new Chobham armor, one of the features widely used for the justification of the M-1. The block improvement program total cost is estimated at over $800 million, which includes research and development and will be implemented about halfway through the program. This program will push the cost of the tank to over $3 million per copy.

Although the M-1 is not even near the full production capability, the Army is already asking the taxpayer for improvement money.

Alternatives

We often hear concerns expressed about the complexity and high cost of the M-1 program, but these concerns are pushed aside by the spectre of a serious tank shortfall. Because the Army has allowed such severe setbacks and a slower pace in the production of the M-1, they cannot be that concerned with a shortfall. One simple way to prevent a tank shortfall is to keep the M-60 production lines open. For the price of one M-1 we can afford 3 M-60's. M-60's can be produced at 1250 per year versus the current goal of 720 for the M-1. If the Army allows the M-60 lines to be shut down in a few years in favor of the M-1, we will be institutionalizing a shortfall of tanks.

The bulk of Soviet tank battalions consist of T-62 tanks to which the M-60 has proven to be superior. Some experts believe that the M-60 is even comparable to the Soviet T-72 tank. Pushing the M-1 program forward despite its several problems means a waste of money for the taxpayers and wasted lives in a battlefield situation.

If the Congress is still concerned about avoiding a tank shortfall and producing effective tanks, there is an improvement kit for the M-60 which includes a 1500 horsepower diesel engine. The kit is made by Teledyne-Continental Motors and is claimed to be under a half million dollars per copy. The Army has not, as far as we can see, seriously considered this "Super M-60."

Refurbishing tanks has been done successfully in the past. General Abrams successfully refurbished 1500 M-48 tanks that proved to be as effective as the M-60.

The M-1 tank is currently a very poor investment for the taxpayer. The committee should carefully consider all options before committing appropriations this year for 720 M-1s. The slump in the production rate, low reliability, and dubious effectiveness in a real battle situation raise serious doubts as to the effectiveness of the M-1 program for our national defense.

Procurement Disease

The M-1 is just one example of the procurement disease that is plaguing all branches of the armed services. High cost, high technology and low effectiveness are currently undermining any serious attempt at improving U.S. defense capabilities. Affordability and effectiveness on the battlefield are what count, not size and complexity. One example of this problem has already been shown in three of our fighters. Compare the following costs:

F-14	$40 million per copy --	highly complex
F-15	$30 million per copy --	
F-16	$11 million per copy	

to the reliability in FY 1980

F-14	70-75%	not fully mission capable
F-15	53%	not fully mission capable
F-16	40%	not fully mission capable

Note: F-16 is the newest system.

In a mock dogfight held in Belgium, pilots with 40 - 60 hours of training in the F-16 dramatically whipped pilots with 300 - 500 hours training in the F-15. In the ANVAL test held at Nellis AFB in Las Vegas, the F-5 (a vastly cheaper and older plane) had a better than 1:1 exchange ratio with the very expensive F-14.

Another example is the advancing cost and complexity of missiles. The simple and inexpensive Sidewinder missiles has twice the number of kills as the more complex and expensive Sparrow missle. Yet the cheapest alternative of all, the 30MM cannon (mounted on the A-10) has twice the number of kills of the Sidewinder.

The taxpayer and the U.S. defense establishment cannot afford to indulge their facination with unnecessary complexity and high cost. We need the Congress to closely monitor tests, enforce contracts to prevent cost overruns, and have the courage to cancel programs that are not effective in a battle field scenario. The taxpayer who foots the bill and the soldier who risks his life deserve no less.

Appendix I
Objectives of the Project on Military Procurement

1) Awaken public awareness to the waste, fraud, and fat in the military budget.
2) Encourage close public and Congressional scrutiny of large military outlays including major weapons systems.
3) Reform the military procurement system toward an effective and reliable defense of the United States.
4) Save the American taxpayer as much money as possible without jeopardizing U.S. defense.
5) Encourage and assist whistleblowers in the military establishment to expose on-going fraud and waste.

Appendix II

1960's	MBT-70 tank developed jointly by U.S., Great Britain and Germany as a standard tank for NATO forces in Europe.
1969	Congress votes to cancel the MBT-70 after finding it too complex to be dependable and too expensive.
1971	U.S. Army proposes XM803 tank to serve as NATO standard. General William Westmorland tells the Senate Armed Services Committee that the tank will cost approximately $600,000.
Dec. 1971	Plans for the proposed XM803 cancelled due to cost and complexity.
March 1974	In testimony before the House Armed Services Committee Lt. General John R. Deane, Jr., Chief of Research and Development discusses a third proposed tank, the XM-1, which will "have the capability to defeat any known Soviet tank under any terrain, weather or visibility conditions." The design to cost figure is estimated to be $507,000 in 1972 dollars. When adjusted for inflation, the cost of the tank zooms to $1,023,000 at time of production. The cost of the XM-1 and its predecessor, the M-60, is compared in 1974 dollars. With the price of the XM-1 figured at $571,000 and the M-60 at $290,000, Lt. Deane concludes that the XM-1 "has to be about 70 to 80% better than the M-60 to pay for itself. In all war games we have run, it is that and more."
1974-1976	The House and Senate Armed Services Committees hear testimony from Pentagon officials including Secretary of Defense, James Schlesinger, about the improvements and advantages the XM-1 will have over the M-60. These include a "1500 horsepower enabling it to reach a speed of 20 mph in less than nine seconds; ability to traverse a bettlefield in half the time required for the M-60; a fire control system making a "first round hit a virtual certainty at the ranges at which tanks most frequently engage each other;" "new technology armor and a compartmentalized design which will make it 100% more survivable than the M-60 on the battlefield;" a lower silhouette and a new transmission.

1976	Two prototypes of the XM-1 are produced, one by General Motors Corp., the other by Chrysler. The G.M. model contains a diesel engine; the Chrysler, an AVCO Lycombing turbine engine traditionally used in aircraft. The Army originally chooses the diesel engine, but its preference is overruled by the Office of the Secretary of Defense. A compromise is reached with West Germany whereby the U.S. agrees to equip the tank with the German 120mm gun; in return, the Germans accept the American-made turbine engine in their Leopard II tanks.
August 1976	Under Secretary of the Army, Norman Augustine testifies to the Senate Armed Services Committee that one of the drawbacks of the turbine engine is that it consumes 15-20% more fuel than a diesel-powered tank. He claims this is offset by the engine's longer life and reduced maintenance cost.
November 1976	The Army awards the approximately $9 billion contract to Chrysler for the XM-1.
	The Germans, however, refuse to buy the turbine engine, preferring to stick with their own Mercedes diesel. The U.S. delays the adoption of the 120mm gun until 1984 so it can be produced domestically. The 105mm gun is to be used until that time.
March 1977	Assistant Secretary of the Army for Research and Development Edward Miller, explains to the House Armed Services Committee that the tank's maintenance concept allows the crew to spend its time fighting rather than repairing the system. The repairs that are necessary can be perfomed "as far forward on the battlefield as possible. The tank is to represent a significant reduction in services, maintenance and repair" compared to other tanks in the field.
March 1978	The Senate Armed Services Committee is told that the Army does not have a diesel engine back-up program for the XM-1 tank and that the turbine engine will meet operational requirements by the time the tank is fielded.
February 1979	Dr. Percy Pierre, Assistant Secretary for the Army for R and D admits that the reliability and durability goals for the turbine engine have not been met. Army Chief of Staff General Bernard Rogers tells the Senate Armed Services Committee that "we had difficulties with the new turbine engine, the suspension system and the fuel system." General Edward Meyer disagrees with a General Accounting office report and claims that engine problems have been "overcome." He says steps have been taken to reduce the tank's 900° exhaust temperature.
January 1980	The GAO has "sufficient reservations" about tests performed on the turbine engine to advise that a full-scale program to develop a diesel engine be initiated. It also recommends that Congress limit further procurement of the XM-1 until the tank's levels of reliability, maintainability and durability are demonstrated. It cautions that the tanks' performance has not been tested in a "simulated combat environment."
February 1980	General Rogers testifies that the GAO has been "working with antiquated data."
	Lt. General Donald Keith tells the House Armed Services Committee that "for the average combat day, the XM-1 probably is going to burn in the vicinity of 40-50% more fuel than the M-60."
Early 1980	Congress receives a letter from the Office of the Secretary of Defense, as per law, stating that it is satisfied that the tank has met the Reliability, Availability, Maintainability and Durability (RAM-D) tests required for the current level of testing.

March 1980	Dr. Percy Pierre, Assistant Secretary for the Army for Research and Development tells the Senate Armed Services Committee that the Army is satisfied with the reliability tests.
April 1980	Results of the Customer TEST FSED of the XM-1 reveal, among other things, that in combat situations, 78% of the tanks would need a power train overhaul after 4,000 miles. The Army requirement is 50%. Under dusty conditions, the tank crewmen must clean air filters every 75 to 100 miles of operation, a task which takes about an hour. The tank test director scored the tank as needing immediate maintenance every 34 miles. The Army scoring conference scored the same data as needing immediate maintenance every 94 miles.
November 1980	Army managers discover that Chrysler is $33 million over budget. Army accepts fault in procedures.
February 1981	Charles Murphy, staff assistant to Congressman Jack Edwards produces an evaluation of the XM-1. He concludes that there are no trends indicating a pattern of equipment failure and there is no need to cut back the program. But he also acknowledges that there are persistent problems with turret electronics, the fire control system and the thermal site. The tank is a long way from meeting the powertrain durability requirements. The Army requirement is that the engine and transmission have a 50% probability of operating 4,000 miles wihtout depot maintenance. The XM-1 is demonstrating a 19% probability. In addition: - The track life of the tank is averaging only 850 miles compared to the required 2,000. - Although the cruising range is supposed to be 275 miles the tanks' "operational" cruising range is only 131. - Because of the enormous quantities of fuel consumed by the tank, the number of fuel trucks needed to support a battalion increases, thus complicating the tanks' logistical requirements. - Another problem is the lack of quality control at the facilities producing the tank. The cost of each tank is now estimated between 2.68 and 2.88 million dollars, jumping from 1.5 to 2.5 million in 1980 alone. To offset the rise, the Pentagon begins to accept less tanks than they paid for. In 1981, this meant 309 tanks, when 569 were paid for. Therefore the Army has requested an additional $1 billion to keep production up to specified levels.
June 17 1981	The results of the OT III and the latest GAO evaluation of the tank are not yet available to the public. However, testimony presented to the House Armed Services Committee by General E.C. Meyer in April reveals that tanks are being accepted without the planned tests because of a lack of test equipment. The committee is assured that alternate tests and other "techniques" are being used to determine if the tank is meeting specifications. RAM-D testing will not be done even though the Senate authorization bill specifies that the Secretary of Defense has to certify he is satisfied with RAM-D results prior to the tanks' production. The durability of the power train will not meet requirements by the end of May because of the problems involved. The requirement is 50% for 4,000 miles of operation. The score has improved to 27% over the previous 19% rating. The production level for the tank slowed to seven in March compared to the target rate of 30 a month. General Meyer says there is a 70% chance Chrysler will produce 60 tanks per month by September of 1982. He blames poor management at Chrysler's plants. The new tanks rolling off the assembly line, not the old, will meet the 70% performance level requirement. Thirty-one tanks in Ohio are still without engines.

The tank's tread only lasts 900 miles, instead of the 2,000 the Army wanted, which will drive the cost up. In addition, the XM-1 consumes 50% more fuel than the M-60. This means six more support vehicles at a cost of $632,800 per battalion are needed to transport fuel. The poorer track durability will mean an additional expenditure of $281,000 per tank over its 20 year lifespan.

Questions are asked about the lack of attention paid to logistics and supportability. GAO guidelines were not developed and implemented until the late 1970's, during the last phase of the XM-1's development program.

The Army admits production problems with Chrysler and Avco-Lycombing with the tank engine. However the Army plans not to pay any claim due to poor production.

Appendix III

Summary of a 1979 Logistics Report prepared by the U.S. Army Logistics Evaluation Agency

According to an ARRCOM and TARCOM assessment of the XM-1's first Five-Year forecast of the repair parts and funding schedule, there was a problem in estimating expenditures. In comparing the earlier budget figures with the then current ones, it became clear that for the first two years, the program experienced a $36 million, or 100% shortfall. The last three years, the shortfall was $3.3 million or 4%.

The report also assessed the reliability of the XM-1's built-in test indicators. Their purpose is to provide early signs of possible malfunctions. There were substantial problems with these systems:

> "Of the 23 warning lights on the driver's instrument panel, 11 lit up at various times during the test when no malfunction could be found, or failed to light when a malfunction existed."

Some of these indicators included the "fuel control fault," "battery water low," "transmission oil low." The ability to detect engine fires was "uncertain," the test of the ballistic computer was not able to detect when the gun turret drive electronics unit failed. The logistics report recommended that selected faults be introduced into the TECOM to test other built-in-test indicators not previously evaluated. The low fluid level indicators and the inability to detect flaws in the turret drive had to be corrected.

A study conducted by the U.S. Army Logistics Center suggested that additional vehicles and equipment for the tank battalion and cavalry squadron would be needed to accomodate the XM-1's increased level of fuel consumption. These included "additional tank and pump units, 600 gallon pods, 5,000 gallon tankers 50,000 gallon collapsible tanks and GOER vehicles" for tactical supply and transportation units.

The Army's logistics report explained that preliminary estimates of the personnel needed to support the XM-1 were based on experience with the M-60 Al Pl tank and a belief that XM-1 would perform well in RAM-D tests. In fact, the actual RAM-D testing indicated that the "XM-1 requires an unscheduled maintenance action about seven times more frequently than does the (M-60 Al Pl)."

Another finding was that the training of fire control computer repairmen would require 120 more hours of instruction because the demand of the system "already taxes the abilities of many indiduals."

The XM-1 did not meet transportability specifications. It exceeded weight size regulations and will require special clearance. Also, because it is no longer than the M-60, only one XM-1 can be transported in a U.S. railcar while two M-60's can be accomodated per car.

After approximately the same number of test miles (over 20,000) the XM-1 accumulated about 3 1/2 times the number of performance reports as the M-60 A2. This meant that the M-60 could travel a little less than twice as far between unscheduled maintenance actions as the XM-1. Expectations that the XM-1's performance would improve between testing and production were not high because the M-60 A2 only improved 2% between service tests and the tests performed by troops; in fact, the reliability of the M-60 A3 dropped between DT 11 (Service Phase) testing and DT/OT 111 testing.

Appendix IV

Customer Test of Fort Knox
XM-1 Extended FSED Durability/Reliability Test
Phase II

In April, 1980, the Army published the results of the second phase of its durability/reliability tests (OT II) on the XM-1 tank which were conducted at Fort Knox, Kentucky.

Some of the significant findings of that report included the following:

1. The tanks' fuel consumption averaged just short of four miles per gallon over varied terrain.
2. During more than 16,000 miles of testing, the XM-1 required 1,007 maintenance actions. The Army Scoring Conference determined that this added up to approximately 94 mean miles between failures, just clearing its own requirement of 90 MMBF. However, the tank test director's own evaluation showed the tank was only traveling 34 MMBF. The findings were based on a test speed of 10 mph.
3. When the XM-1 was tested in a dry, dusty environment, the air filter required servicing every 75-100 miles.
4. The average track life was only 707 miles, compared to an original expectation of 2,000 miles of useful wear.

Comments made by the troops involved in six weeks of fielding exercises with the XM-1 in July of 1979 also revealed the following shortcomings:

1. The tank drivers had difficulty with the VVS-2 Night Site. They reported distortions in the image that interfered with their ability to operate the tank.
2. The drivers complained they were unable to see the ground closer than 27 1/3 feet from the front of the tank which created problems when trying to cross ditches and other obstacles.
3. When the loader's hatch was open on the top of the tank, it interfered with the ability of the gunner to fire to the rear of the tank.
4. The troops found the tank commanders station or cuppola extremely awkward. It was difficult to fire the .50 caliber weapon and visibility was poor from that position.

5. The gunners preferred that the tanks' stabilization feature be made optional in the fire control system rather than have it turned on automatically when the turret power is on.

6. The ammunition storage compartments were difficult to open manually and crews were using screwdrivers to open the doors.

7. The crews' most difficult task was rotation of the track which took three hours and may be required every 250 miles.

8. When closed the drive hatch lock interfered with the driver's operation. When it was open, it vibrated. This could cause the hatch to close automatically and strike the driver.

9. The drivers' hatch seal did not prevent water and dust from entering the drivers' station and water drainage was poor.

Footnotes

1. Customer Test of Fort Knox -- XM-1 Extended FSED Durability/Reliability Test, Phase II and Final Report, April 18, 1980. U.S. Army Armor and Engineer Board, Fort Knox, Kentucky. TRADOC TRMS No. 9 - 000158., page 1 - 7.

2. Testimony by General E. C. Meyer to the House Appropriations Subcommittee on Defense, April, 1981.

3. Report by U.S. Army Logistics Evaluation Agency, Department of the Army, New Cumberland, Pennsylvania.

4. Report prepared by Charles Murphy, Staff Assistant to Congressman Jack Edwards, Ranking Minority Member, Defense Appropriations Subcommittee. February 23, 1981.

5. Wall Street Journal, April 20, 1981.

6. Committee on Armed Services, United States Senate, Department of Defense Authorization for Appropriations for Fiscal Year 1982. Report No. 97-58. U.S. Government Printing Office.

XM-1 TANK

Senator **Stevens**. Thank you very much. I don't know if you have seen the comment by my good friend and colleague about high technology. We welcome this kind of review of our procurement efforts. The difficulty is that the XM-1 is very close in terms of original cost if you look at inflation.

We have some real difficulties with the tank. There is no question about that. In constant 1972 dollars it has gone from $507,000 to $530,000 a copy. It is true that it is now up to $2.5 million, but that is the result of inflation and going through a period of development. It is difficult for us to keep up.

I think this committee will agree with you on many things you have said about trying to lock in some of this technology and perfect it and not stretch our capability as far as state of the art is concerned on the battlefield.

We are very concerned about the tank. There is no question about that.

Senator Rudman?

Senator **Rudman**. I believe that many of your facts and figures are correct in the context and time in which they were researched. I believe that an accurate assessment of many of those problems will not be established until the current testing is complete and we have an opportunity to address a number of the problems which you have mentioned, which are quite accurate in terms of the time that they were tested.

I can assure you that the members of this committee and the authorization committee, are going to look very closely at the current round of testing and make some hard decisions about whether or not there are problems we have not addressed.

I have one other comment, if I may, Mr. Chairman.

REVOLUTION VERSUS EVOLUTION IN WEAPON SYSTEMS

Are you familiar with the initiatives suggested by Secretary Weinberger and, in fact, now implemented in writing by Deputy Secretary Carlucci, regarding this whole question of revolution in weapon systems, as opposed to evolution? Are you familiar with that?

Ms. **Rasor**. Yes, I am familiar with it.

Senator **Rudman**. I believe that this initiative on the part of this administration and this Secretary of Defense and his deputy to address this whole problem of design concept, which is really where these problems start, in respect to how they are specified, is an excellent initiative and one that I have discussed with Mr. Carlucci. I believe it addresses problems that we all share a concern with.

The thing that I wonder if you are familiar with is the amendment to the authorization bill that was drafted and sponsored by Senators Stennis, Nunn, and myself, in regard to enforcing the services reporting to Congress every quarter on the status acquisition reports concerning cost overruns?

I mention this only to show you that we do share your concerns, if not all your facts. There is honest disagreement with some of your facts in the testimony and the current round of testing. At least my feeling is that there is great concern for preserving a consensus for a strong national defense and the only way we can do that is to be responsible in the way we procure.

Ms. RASOR. I would like to point out, most of the stuff that I brought up on the logistics and production problems and the reliability problems are things that were told to this committee last April and have not been published yet.

What I am saying is the most up-to-date public information that is available. As far as 1983 is concerned, the scoring conference has not taken place yet. I think it is important for the Congress to look at the raw data. I think it is very important that these tests be looked at and that these new tests are done.

What needs to be done is to see if it is going to really work in a battlefield situation. We think a lot of testing in the past has not been done that way.

The infrared Maverick test, when it was done, they put infrared beacons on the tanks. Enemy tanks are not going to have beacons on them. What you have to do is look at that.

The way to do it is to put your foot down on one weapon system at a time. General reforms are a good idea but I think the system learns by example, the system learns by incentives.

President Carter wanted to reform the bureaucracy; he found it overwhelmed. You have to make examples. The only way that is going to happen is, you take something like this tank and you say you are going to make it work and meet the requirements. They are not even meeting their own requirements and the Army admits it.

We did not set those requirements; you did not set those requirements; the Army set their requirements based on what the M–60 did in its testing.

Senator STEVENS. We had already determined to zero in on this tank. Again, perhaps you will have a chance to read one of these hearings we held this year on the tanks. It does bother us considerably that we have continued cost overruns, but even more than that, that we have the continued modification with R. & D. being cranked in when it is on the production line, which delays it even more. It delays it more than any of us realize by constant modifications being cranked into the tank while it is still on the line.

I would say you are on the right track. I am glad to see your positive attitude toward procurement of the tank and improving our capability.

We welcome your testimony. We will be happy to have your continued attention to what we are trying to do.

Senator RUDMAN. In addition to looking at raw data rather than quantified results, several of us, including this Senator, intend to observe firsthand some of the latest rounds of tests of the tank on the site. I think you will find many people do have a deep interest in following this.

Ms. RASOR. One of the things that I am concerned about is what I call the "kick-the-car" syndrome. You go down and you look at the tank. It looks impressive. You come back. You go out and buy a car; you kick the car. If it doesn't fall apart, you buy it. When you see the kind of tests being done, it is easy to be impressed with these weapon systems. It is easy to become impressed with technology.

Senator RUDMAN. Having spent some time in tanks, I think I know what you are talking about.

Senator STEVENS. What is your background?

Ms. RASOR. I have been working on waste in goverment for the last 2 years. I decided the Pentagon was one of the best payoffs.

THE AMERICAN LEGION

STATEMENT OF JIM HUBBARD, DEPUTY DIRECTOR, NATIONAL SECURITY-FOREIGN RELATIONS COMMISSION

ACCOMPANIED BY PAUL EGAN, ASSISTANT DIRECTOR, NATIONAL LEGISLATIVE COMMISSION, THE AMERICAN LEGION

Senator STEVENS. Mr. Paul Egan, assistant director, national legislative commission, The American Legion.

Mr. EGAN. Mr. Chairman, mine is primarily a liaison function to introduce our principal witness, Jim Hubbard. We appreciate the opportunity to present his testimony.

Mr. HUBBARD. Mr. Chairman, there is clearly a consensus in this Nation about the need to rebuild our Nation's defenses and I would add at this point, in spite of the comment by the previous witness, we believe the M-1 tank is the best tank in the world.

Senator STEVENS. I would agree it could be the best tank in the world. I am not sure it is right now. The testimony before this committee is something that opened all our eyes. I think that this group that testified has zeroed in on one of the great problems we have and that is the constant feeling that as this new equipment rolls off the line it must be updated with everything anyone has not thought of during the period of prouction rather than getting the tanks on the line and going to another generation if we are going to upgrade them.

We have examined the cost overrun implications of that tank and they are staggering.

Mr. HUBBARD. As taxpayers, Mr. Chairman, we too are concerned with that problem. The concept for that tank and how it will operate on the battlefield we hope will never have to be tested. On the other hand if it serves as a deterrent, then it will have done its job.

Senator STEVENS. That is true. We have been doing a great deal of research on that tank. The implication of the oversophistication in a weapon that is supposed to have a great deal of reliability upon the training and expertise of our people who operate it, the total implication of what they are doing in sophistication and high technology of a tank of that type leads us to believe that has to do with a lot of the cost overrun.

Mr. HUBBARD. I don't disagree with you one bit. The American Legion believes the current budget request made by this administration coming before this committee constitutes the all-important first step on the long journey to regain our status as the most powerful nation in the world. There are several areas of interest contained in this budget.

ARMED FORCES PAY HIKE

Last fall, the 96th Congress granted the members of the Armed Forces an 11.7-percent pay increase which partially offset the loss of buying power experienced by the uniformed military personnel over several years. That still leaves as many as 25,500 military families on food stamps. When the proposal to increase pay this fall reaches this subcommittee, The American Legion urges your support for its funding.

Senator STEVENS. We just added 5.3 percent to that.

Mr. HUBBARD. I am aware of that. I also believe the House is going to do that. The House is looking at targeting a larger increase in the fall. We will reserve judgment until we see which bill surfaces on the other side.

MINORITIES IN ARMED FORCES

Clearly, the Armed Forces are becoming the haven for those who are unable to find meaningful employment elsewhere. The services are increasingly recruiting the poor, the black, the Hispanic, the economically disadvantaged. The Armed Forces in too many cases have become the employer of last resort. This is not as it should be, and is most assuredly not in the best interest of the United States. If a nation decides that it must defend itself, the burden of that defense must fall equally among all citizens.

AMERICAN LEGION SUPPORT FOR RETURN TO CONSCRIPTION

The only realistic method of spreading the requirement of service in the Armed Forces equally is a return to conscription. The American Legion is very much aware that it is not the province of this subcommittee to consider legislation on the draft. We are also of the opinion, however, that this subcommittee ought to be aware of our position on this controversial subject at the same time that we urge higher pay and benefits for those who currently serve. Additionally, we know that at some point, the members of this subcommittee will be asked to assist in rendering a decision as Members of the U.S. Senate, and so we take this opportunity to inform you of The American Legion's position on this important subject.

The mission of the U.S. Army, in general, is to fight and win the land battle. To accomplish this with any degree of success, the Army must go into battle with equipment at least as capable as that of any potential adversary. This includes all equipment for individual weapons to sophisticated fire direction systems used to target artillery and antiaircraft fire. In the minds of some defense experts, the Army does not now possess the modern equipment in some categories necessary to insure success on the battlefield.

NEW ARMORED PERSONNEL CARRIER

The U.S. Army is currently deployed and ready for combat using an armored personnel carrier designed in the 1950's. The Vietnam experience showed its vulnerabilities to Soviet antiarmor weapons. There is a very real need for a new infantry fighting vehicle to replace the current APC. The M-2 vehicle currently under development has been chosen by the Army as the most desirable alternative to the current and outdated M-113. It affords greater firepower, greater mobility, and greater protection than its predecessor.

It is the first major advance of its kind in more than a decade and will provide the Army with greater capability when compared with its Soviet counterparts. Accordingly, we urge the funding necessary to begin production. The budget request for procurement is $699.8 million. The American Legion supports this request.

M-1 TANK

The M-1 tank is one of the most modern tanks in the world. The capability of the M-1 to meet its firepower, survivability, and mobility goals was proven in the testing stage. The first prototype models are now being evaluated to insure that these goals are adhered to in the production models. The budget request for $1.3 billion for the procurement of 569 tanks in 1982 is supportable on the grounds that this new, survivable, highly accurate weapons system is badly needed as soon as possible.

If the Army on the ground is to have a reasonable chance of success on any potential battlefield, the control of the airspace over the battlefield must be limited as far as possible to friendly aircraft. To complement the mission of the U.S. Air Force, an array of defensive antiaircraft weapons is needed.

ANTIAIRCRAFT WEAPON SYSTEMS

The new systems include: Patriot which, if funded, will replace the Nike-Hercules as the primary defense against the high- and medium-altitude threat; division air defense gun [DIVAD] will give the Army a highly mobile, ground-based, quick-reacting, air defense weapon to counter the armed helicopter-fighter bomber threat; Stinger will provide a manportable replacement for the current Redeye with a more capable guidance system. The American Legion supports the budget requests for Patriot, Stinger, and DIVAD systems as being absolutely necessary to insure maneuverability of friendly ground forces.

RAPID DEPLOYMENT FORCE

While these requests presuppose a major emphasis on the potential for a land battle in Western Europe, we also believe the Army needs these systems to equip portions of the Rapid Deployment Force [RDF]. The RDF needs equipment that is mobile in the strategic sense, and effective in the tactical sense. The systems requested have proven themselves in both categories under the testing conducted thus far.

With the advent of Secretary Haig's stewardship of the Department of State, the United States entered a period of more forceful diplomacy. The United States is no longer hesitant about sending powerful signals to aggressors that we will not stand idly by and watch while they conduct violent takeovers of legitimate governments, particularly when those takeovers are contrary to the national interests of the United States. This new diplomacy requires a more mobile, more flexible, and more capable armed force, in particular, an expanded U.S. Navy.

EXPANSION OF NAVAL STRENGTH

The Secretary of Defense is faced with the decision on how best to expand the strength of the Navy in a fairly rapid manner. Expansion means an increased number of combatant ships. The choices are relatively limited. The Navy can build new ships, a time-consuming process, or it may opt to remove ships from the mothball fleet, a process that will take substantially less time than new construction. The position of our organization is that both options be undertaken simultaneously.

REACTIVATION OF MOTHBALLED FLEET

In the short term, modernizing older ships with updated communications, command and control equipment, and modern weapons systems is the only reasonable option currently available until such time as new ships are built and deployed. Accordingly, the American Legion supports the administration's request for funds to reactivate the carrier *Oriskany* and the battleships *New Jersey* and *Iowa*.

AIR FORCE STRATEGIC NUCLEAR FORCES

To insure that the strategic nuclear forces assigned to the Air Force are capable of functioning in their primary role of deterrence, they must remain capable of executing our national defense of last resort under all conditions and in all possible situations. Improvement of the strategic force must continue in terms of modernization and readiness training.

The manned bomber force provides the President with the most flexible of the three legs of the strategic Triad. It can be used to insure survivability and demonstrate national resolve as well. It can be recalled if the situation warrants, and can be used against mobile targets.

Mr. Chairman, this committee is well aware of the chronological age of the manner bomber leg of our strategic Triad. With the exception of those squadrons equipped with the FB-111, the Strategic Air Command is equipped with an aircraft well over 20 years old. That fact may say something very favorable about the designers of the 1950's who conceived and built the B-52, but we do not feel it makes any strategic sense to send pilots on missions in equipment that old, even with updated electronics. The American Legion is very much in favor of a new strategic bomber to improve the probability of aircraft survival. One of the attached resolutions speaks to that issue, and we urge your attention.

IBM FORCE

The survivability of the intercontinental ballistic missile force has been declining for some time. That decline will continue with additional improvement achieved by the Soviets in the accuracy of their delivery vehicles. Efforts to harden the silos of the existing Minuteman force have had some effect in offsetting this increased accuracy but at best the decision to harden the Minuteman silos is a stopgap measure. For this reason, Mr. Chairman, we are also urging you to provide the necessary funding for the MX missile program. We have not taken a position on the basing mode to be utilized in deploying the system.

Suffice it to say that the Secretary of Defense has been urged to recommend a decision to the President at the earliest possible date consistent with the needs of the program. When a deployment mode has been recommended we may very well have some comments. In any event, the Minuteman system is becoming increasingly vulnerable to a Soviet first strike.

MISSILE BASING MODE

Senator **Rudman**. Has the Legion made a decision as to the mode it ought to be placed in?

Mr. **Hubbard**. We have not taken a position on the basing mode. I think it is interesting to note the American Legion members in Utah would be favorable to basing it in Utah whether it is Racetrack or Dragstrip.

Senator **Rudman**. They are a very significant minority in Utah.

AIR FORCE TACTICAL AND FIGHTER WINGS

Mr. **Hubbard**. It has also become increasingly clear over the past several years that the lack of operations and maintenance funding has had serious effects on the readiness of the Air Force tactical and fighter wings. Some front line units are only at a readiness rate of 60 percent. The commanders concerned consider this unacceptable but are unable to remedy the situation due to a lack of spare parts resulting from reduced O. & M. funding in the recent past. The American Legion believe it imperative that the O. & M. funding for fiscal year 1982 provide adequate spares for all essential combat systems, adequate fuel for the training and skill maintenance of our combat pilots, adequate opportunities to test the weapons which will be used in combat in realistic training exercises. Indeed the above holds true for all branches of the Armed Forces.

Mr. Chairman, we are pleased that the new administration has seen fit to recognize the dangers posed in conducting diplomacy with the Soviets from a position of tactical and strategic weakness. This next decade will be a time of trial, a time of friction between nations, and a time of dangerous shifts in alliances with changes in governments all over the world. To the extent that a strong and powerful armed force and no-nonsense foreign policy can protect the national interests of the United States we are wholeheartedly in favor of them.

RESOLUTIONS ADOPTED AT 62D NATIONAL CONVENTION

Our 62d national convention held last year in Boston adopted 21 resolutions concerning the national security of the United States. Copies of the full texts of each of these resolutions are appended to this statement, and the rationale for the American Legion's support for each position is contained therein. We respectfully request that these resolutions be printed in the record of these proceedings. The numbers and titles are as follows:

Number and subject

94—National defense.
99—Enhanced radiation weapons.
103—Beam weapons.
104—Strategic nuclear forces.
106—ELF.
107—Modernize the United States Navy.
124—M-X missiles.
284—Air launched cruise missile.
285—Airborne warning and control system programs.
339—Urging increases in pay and benefits for members of the U.S. Armed Forces.
457—National defense.
461—Reinstitute induction authority.
463—Airlift capability.
465—A-10 aircraft.
466—F-15 aircraft.
467—F-16 aircraft.
470—Standoff penetration bomber mixed forces concept.
472—Support for a strong Naval Reserve.
474—ARAPAHO.
475—Strategic nuclear policy.
523—National Guard and Army Reserves.

[The prepared statement of the American Legion by Mr. Hubbard follows:]

Statement of
The American Legion

by

PAUL S. EGAN, ASSISTANT DIRECTOR
NATIONAL LEGISLATIVE COMMISSION
and
JIM HUBBARD, DEPUTY DIRECTOR
NATIONAL SECURITY-FOREIGN RELATIONS COMMISSION

Thank you, Mr. Chairman, for providing The American Legion this opportunity to present the views of our 2.7 million members on the FY 1982 defense budget.

Mr. Chairman, there is clearly a consensus in this nation about the need to rebuild our nation's defenses. For far too long, we have lagged behind the Soviets in developing the kinds and numbers of weapons necessary for defense. For too long, we have also under-paid the men and women who serve in the uniform of the armed forces of our country. Finally, we have for too long ignored the old maxim that the only way to insure peace is to remain prepared -- better than any other nation -- for conflict. The defense budget proposed by the new Administration can be expected to reverse these trends and we support that proposal.

The American Legion believes the concurrent budget request made by this Administration and agreed to by Congress constitutes the all important first step on the long journey to regaining our former status as the most powerful nation in the world. There are several broad items of interest contained in this budget which we believe require additional amplification. Necessarily each shall be discussed in turn.

MANPOWER AND THE DRAFT

Last fall, the 96th Congress granted the members of the armed forces an 11.7% pay increase which partially offset the loss of buying power experienced by the uniformed military personnel over several years. That still leaves as many as 25,500 military families on food stamps. When the proposal to increase pay this fall reaches this Subcommittee, The American Legion urges your support for its funding. We find it shameful that this nation has failed to pay a suitable living wage to the men and women who defend it.

Clearly, the armed forces are becoming the haven for those who are unable to find meaningful employment elsewhere. The services are increasingly recruiting the poor, the black, the Hispanic, the economically disadvantaged. The armed forces in too many cases have become the employer of last resort. This is not as it should be, and is most assuredly not in the best interest of the United States. If a Nation decides that it must defend itself, the burden of that defense must fall equally among all citizens.

The only realistic method of spreading the requirement of service in the armed forces equally, is a return to conscription. The American Legion is very much aware that it is not the province of this Subcommittee to consider legislation on the draft. We are also of the opinion, however, that this Subcommittee ought to be aware of our position on this controversial subject at the same time that we urge higher pay and benefits for those who currently serve. Additionally, we know that at some point, the members of this Subcommittee will be asked to assist in rendering a decision as members of the United States Senate, and so we take this opportunity to inform you of The American Legion's position on this important subject.

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99	Enhanced Radiation Weapons
103	Beam Weapons
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62nd NATIONAL CONVENTION OF THE AMERICAN LEGION
HELD IN BOSTON, MASSACHUSETTS
AUGUST 19-21, 1980

RESOLUTION 94

COMMITTEE: National Security

SUBJECT: NATIONAL DEFENSE

WHEREAS, the Administration's budget proposals for 1981 for the Department of Defense provided no real improvement in the program for defense of the United States and its interests, and the Congress is not likely to provide adequate increases;and

WHEREAS, the budget does not provide adequately for increases in the cost of fuel, for inflation in other costs, and for equitable increases in compensation; and

WHEREAS, there has been a continuing downward trend in the strength of the United States and NATO armed forces in the face of continuing increases in Soviet and Warsaw Pact forces, and the budget provides no increase in U.S. force structure or for the new rapid deployment force; and

WHEREAS, only nominal amounts are provided for production of new Army weapons, additional ships for the Navy and fighter aircraft, and no significant provision is made for new strategic weapons including long range aircraft; and

WHEREAS, while one half of the nation's combat power and a larger portion of our combat support capability is in the Reserve components, the Reserve forces still lack much of the modern equipment, training systems, administrative support and recruiting incentives needed to maintain strength and readiness; and

WHEREAS, recent training and mobilization exercises have shown the critical inadequacy of current plans, systems and resources for manpower mobilization, transportation, stock-piling, and defense production to support mobilization and a prolonged military operation continued until the enemy is defeated; and

WHEREAS, the American public is becoming increasingly aware that the current efforts to achieve peace through trust and detente are failing and that the Soviet Union is continuing its military buildup and is accelerating its program of world domination; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that the Administration and the Congress conduct a comprehensive review of the defense program of the United States and develop and implement a program, with significant annual budget increases over the next several years with allowances for inflation, to reverse the current downward trend, close the gaps in our defense capabilities and assure the security of the nation and support of its foreign policy by providing for:

1. Additional strategic weapons for defense and deterrence, including new long-range combat aircraft and a new strategic missile system;
2. An expanded Navy capable of protecting U.S. interests on the seas throughout the world;
3. Airlift and sealift required to move troops and equipment when and where needed to protect our country at home and our forces abroad;
4. Adequate conventional forces, both Active and Reserve, with modern equipment, supplies and transport, and effective training, including separately maintained rapid deployment forces to meet potential emergency situations;
5. Rebuilding America's industrial base: plants, materiel, manpower, skills and priority determinations, so our economy may supply the equipment needed for the nation's defense; and
6. Enforcement of policies which recognize and support the essential role of the Reserve components and their present need to be adequately equipped, effectively trained, fully manned and administratively prepared to move quickly when and where needed.

RESOLUTION 99

COMMITTEE: National Security

SUBJECT: ENHANCED RADIATION WEAPONS

WHEREAS, in Central Europe, NATOs tanks and tank forces are outnumbered and outgunned by Warsaw Pact tanks and forces, including Soviet tank forces; and

WHEREAS, because NATO is a defensive alliance, the strategic initiative lies with the communist Warsaw Pact nations who can launch a massive tank attack at a time and place of their own choosing; and

WHEREAS, an enhanced radiation/reduced blast "neutron" warhead can be developed and deployed to offset the tremendous communist tank predominance; and

WHEREAS, additional tanks, anti-tank guns and related Army weapons, not currently in production in sufficient quantities, are needed for allied forces defense in Europe; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that in the absence of any significant, verifiable reduction of communist tank power in Central Europe, immediate funding of the enhanced radiation/reduced blast warhead be authorized; and that adequate numbers of tanks, anti-tank weapons and "neutron" warheads be produced and deployed for the defense and security of the United States and our NATO allies in Europe.

RESOLUTION 103

COMMITTEE: National Security

SUBJECT: BEAM WEAPONS

WHEREAS, energy-bean weapons are being tested by both the United States and the USSR; and

WHEREAS, some intelligence sources estimate that the USSR has spent from $10-25 billion in a development effort for 20 years; and

WHEREAS, the United States has spent only $1.5 billion on "directed energy" research in the past decade; and

WHEREAS, while U.S. weapon scientists have been restricted largely to researching and testing beam weapons, the Soviets have pushed ahead with the development of actual weapons; and

WHEREAS, intelligence officials are in general agreement that the Soviet Union has a laser system that is capable of destroying low-orbiting American Satellites; and

WHEREAS, an authoritative intelligence estimate reported to the Administration in May 1980 that evidence shows that the USSR is working on a satellite-killing laser weapon which could be deployed in space by the mid-1980s; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we urge a far greater effort by the United States in researching and developing beam weapons particularly in high-energy laser (HEL) and the charged-particle beam (PB) and, be it further

RESOLVED, that we urge vigorous research into the feasibility of satellite based anti-ballistic missile weapons.

RESOLUTION 104

COMMITTEE: National Security

SUBJECT: STRATEGIC NUCLEAR FORCES

WHEREAS, over the past decade the United Stares has unilaterally restrained, deferred and cancelled programs that would have modernized our strategic nuclear forces, while the Soviet Union, during the same period, has engaged in an uprecedented modernization and buildup of their strategic nuclear forces to a point that they have already surpassed the U.S. in some areas and their momentum will allow them to gain an advantage over the U.S. in most of the major statistical indicators of strategic force by the early 1980s; ;and

WHEREAS, because of lead times in modern weapons programs, this progressive shift in strategic balance will continue into the latter part of the 1980s when our modernization programs may be far enough along to restore full strategic parity; and

WHEREAS, we face a period of high risk and great uncertainty in the strategic balance throughout the coming decade, and only through resolutely pursuing modernization can we overcome 15 years of damaging neglect; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we must not let the Strategic Arms Limitation Treaty (SALT II) ratification process divert our attention from the pace of strategic modernization needed to minimize the extent and duration of the strategic imbalance between the United States and the Soviet Union; recognizing that it is absolutely essential to proceed with our submarine launched ballistic missile modernization program, the development and deployment of the M-X missile, rapid deployment of the air launched cruise missile, and the development of a manned penetrating aircraft to succeed our aging B-52s in order to retain the flexibility and effectiveness of the strategic TRIAD.

RESOLUTION 106

COMMITTEE: National Security

SUBJECT: U.S. NAVY ELF SYSTEM OF COMMUNICATION

WHEREAS, the United States Navy has determined that the proposed Extremely Low Frequency (ELF) system of communication is vital for the defense of our nation; and

WHEREAS, the ELF system will be an essential part of the Navy's world-wide communications system to enable us to continue to compete with the Soviet Union as a sea power; and

WHEREAS, the National Academy of Sciences has determined no health hazards or environmental problems from the placement of an ELF system in the United States; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we support an Extremely Low Frequency system of communications and urge the Navy to continue its efforts to construct this vital project for the effective operation of our submarine force and the security of the United States.

RESOLUTION 107

COMMITTEE: National Security

SUBJECT: MODERNIZE THE UNITED STATES NAVY

WHEREAS, in the past decade the once unchallengeable United States Navy has declined from 1,055 ships and over 8,500 aircraft to less than 500 active ships of all types, with comparable reductions in aircraft; and

WHEREAS, the Soviet Navy now totals more than 1,750 combatant ships of all types, and large numbers of aircraft; and

WHEREAS, the Soviets are moving toward control of the seas, as shown by their all-ocean series of naval maneuvers, and have clearly demonstrated capability to cut our vital sea lines of communications and to interdict the critical passage points of the world such as Malacca Straits, Ceylon, Cape of Good Hope, Gibralter, Cape Horn, Suex and the Panama Canals; and

WHEREAS, Soviet use of seapower to achieve their national objectives has allowed them to "leap frog" the Mediterranean and establish positions of strength in Northeast Africa, Southwest Africa (Angola) and in Yemen on the Arabian Peninsula; and

WHEREAS, the U.S. economy and industry are dependent on unhampered access, during war or peace, to at least 26 key minerals and strategic materials imported from abroad; and

WHEREAS, our national survival and the security of our allies depends upon continued availability of the seas for commercial and military traffic; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, that the Administration and Congress, recognizing the inadequacy of the current five year Navy shipbuilding program, act as soon as possible to restore the United States to a position of naval supremacy with a modern balanced fully manned sea control force of submarines, aircraft carriers and aircraft, and other surface weapons ships; and provide additional appropriations over the next several years for this purpose.

RESOLUTION 124

COMMITTEE: National Security

SUBJECT: M-X MISSILE

WHEREAS, the land-based intercontinental ballistic missile (ICBM) is a cornerstone of our national strategic deterrent; and

WHEREAS, under the provisions of the interim SALT agreement, Soviet strategic forces are numerically superior to those of the United States and the Soviets deploy three times the missile throw-weight of comparable U.S. forces; and

WHEREAS, the Soviet Union has initiated new ICBM programs representing a massive effort in the form of new missiles, new bus-type dispensing systems, new Multiple Independently Targetable Re-entry Vehicle (MIRV) payloads, new guidance systems; new type silos; new launch techniques and probably new warheads; and

WHEREAS, all available evidence suggests that targeting our ICBM silos continues to be high priority for the Soviet ICBM force; and

WHEREAS, a first strike capability by the Soviet Union would destroy the balance of strategic weapons systems between us; and

WHEREAS, the Secretary of Defense has stated that "reducing the vulnerability of the land-based ICBM force is the highest priority strategic initiative" in the Department of Defense five-year program; and

WHEREAS, the Air Force has undertaken programs to improve the accuracy, yield and survivability of its Minuteman missiles including improved guidance and propulsion, Mark 12A to increase the warhead yield, and hardening of the silos; and

WHEREAS, in the long run the M-X missile provides the most promising ICBM initiative for preserving essential equivalence; and

WHEREAS, survivability is a dominant concern in the M-X ICBM modernization program and the Air Force has proposed various basing modes for the deployment of the M-X missile designed to enhance such survivability through locational uncertainty and mobility; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that the Administration and the Congress be urged to provide full support to Air Force efforts to develop and deploy the M-X missile as expeditiously as possible to insure that the U.S. does not allow the Soviet Union to achieve a position of strategic superiority inimicable to our national security interests.

RESOLUTION 284

COMMITTEE: National Security

SUBJECT: AIR LAUNCHED CRUISE MISSILE

WHEREAS, the cornerstone of our strategic forces is the TRIAD, a combination of land and sea based ICBMs and long-range strategic bombers; and

WHEREAS, the Air Launched Cruise Missile (ALCM) is being developed as an adjunct to the penetrating bomber with a view of enhancing the effectiveness of our manned bomber forces in the 1980s and 1990s; and

WHEREAS, the ALCM is a small, pilotless vehicle that can be launched from an aircraft and navigate long distances with high accuracy which makes it well suited for employment against lightly defended, hardened targets; and

WHEREAS, the ALCM is being designed for carriage on the B-52 and other aircraft; and

WHEREAS, the ALCMs will increase the "foot print" of the bomber force by allowing greater flexibility in routing and target coverage while diluting the effectiveness of area air defenses; and

WHEREAS, by insuring the continued strength of the air-breathing TRIAD component, the cruise missile will enhance strategic stability; and

WHEREAS the ALCM has completed a successful advanced development program, and a competitive fly-off of missiles produced by the competing contractors is to be held later this year leading to source selection in 1980; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we urge the Department of Defense to request, and the Congress to approve, the funds necessary to complete the development and deployment of these cruise missiles necessary to upgrade the nuclear deterrent capabilities of the United States.

RESOLUTION 285

COMMITTEE: National Security

SUBJECT: AIRBORNE WARNING AND CONTROL SYSTEM PROGRAMS

WHEREAS, future demands on our surveillance, warning and control capabilities in support of tactical air operations, particularly in the context of a European conflict, will be quite severe; and

WHEREAS, an AWACS system has been developed by the Air Force consisting of an advanced radar system mounted in a Boeing 707 E-3A airplane with associated date processing and communication equipment; and

WHEREAS, the fundamental requirement for AWACS is driven by the rapidly growing ability of Soviet-built aircraft to penetrate defenses at very low altitudes---- beneath or screened from the view of ground radar systems; and

WHEREAS, flight demonstrations in Europe, as well as the United States, have confirmed the ability of AWACS to inter-operate with the NATO air defense system and to provide unprecendented long-range airborne surveillance and warning that are vital for credible deterrence in peacetime and for precise control of forces engaged in combat in the event of conflict; and

WHEREAS, the AWACS can be deployed to any region in the world, and immediately begin its mission of surveillance, warning or direction of air-to-air or air-to-surface combat operations; its inherent mobility, coupled with its long-range radar enabling it to perform its mission while remaining outside the threat area of enemy surface-to-air missiles or fighter aircraft; and

WHEREAS, the view provided decision makers by AWACS of the battle area and the collection and dissemination of real-time data such as position and track information on enemy aircraft and ships and the location and status of friendly ground troops will improve by order of magnitude the centralized, timely management of national assets; and

WHEREAS, complementing our national AWACS program is our planned participation in the proposed NATO AWACS program the largest, single commonly funded project ever undertaken by the alliance; and

WHEREAS, the AWACS will also be an essential element of our air defense system in the United States which role has acquired even greater significance in view of the new Soviet supersonic bomber, the Backfire and the long term reduction in size of our dedicated air defense interceptor force; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that the Administration and the Congress continue to support the Air Force in its efforts to procure a sufficient number of AWACS to meet our national defense requirements, now and in the future.

RESOLUTION 339

COMMITTEE: National Security

SUBJECT: URGING INCREASES IN PAY AND BENEFITS FOR MEMBERS OF THE U. S. ARMED FORCES

WHEREAS, pay and benefits in the armed forces are below national averages at comparable levels, causing retention problems, particularly in technical fields of essential, qualified professional personnel in all branches; and

WHEREAS, since 1972 the Consumer Price Index (CPI) has risen 76% while military compensation has risen only 51% resulting in a decline of over 14% purchasing power for all military personnel and a decline of as much as 25% for some enlisted personnel in the lower pay grades; and

WHEREAS, based on published standards, at least 200,000 and possibly as many as 275,000 military families, would qualify for welfare payments because of their low compensation; and

WHEREAS, the armed forces fell short of recruiting goals by 25,000 last year; and

WHEREAS, as a result of this lower recruitment the armed forces have experienced both quantitative and qualitative short-falls of professionally qualified personnel in critical fields; and

WHEREAS, retaining professionally qualified personnel after their first, second and third enlistments and junior officers is an increasingly acute problem which will rapidly become critical for the conduct of military operation unless remedial action is taken; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that the President and Congress take immediate action to bring about the necessary increases in pay and benefits for members of the armed forces to recruit and retain sufficient numbers of quality men and women.

RESOLUTION 457

COMMITTEE: National Security

SUBJECT: NATIONAL DEFENSE

WHEREAS, the United States today is in greater danger than at any time since those early days of World War II after the surprise attack on Pearl Harbor; and

WHEREAS, over the past few years the over-all effectiveness of the United States armed forces has been eroding for various reasons, including the unsatisfactory recruitment of qualified applicants through the concept of a volunteer Army, the increased costs of modernization, the escalation of research and technological development costs and the inflationary rise of operations and maintenance costs; and

WHEREAS, during the Vietnam war era research and development efforts were minimized in order to maintain and equip the forces in being for combat operations, depreciating and aging the operational vehicles and equipment that were the mainstay of our Navy, Army, Air Force and Marine Corps; and

WHEREAS, during this same period of time, the Soviet Union has been devoting massive resources out of its weak economy to building up its military might and has achieved military superiority in many areas; and

WHEREAS, the American people must recognize the threat to all peace loving, independent and open societies in the face of Soviet expansion and their use of surrogate forces in the spread of communism; and

WHEREAS, the United States is now faced with the choice of rapidly rebuilding our military forces so as to assure our survival as an independent, strong nation or we can accept the ultimate fate of the perilous course which we have been pursuing and prepare to live under the terms and conditions which will be dictated by the Soviet Union; and

WHEREAS, given such options there is no question but that the American people are prepared and willing to make such sacrifices as may be required of them to restore the military strength of the United States to a position where it cannot be challenged; and

WHEREAS, an increase in defense expenditures above the cost of inflation by 15% a year for the next five years would be a visible indication to the Soviet Union and our allies that the United States is not going to sit by and mindlessly allow the Soviet Union to achieve a position of world domination; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we urge both the Administration and the Congress to develop and fund, a 5-year defense plan, which provides at least a 15% increase each year in defense expenditures in an effort to provide the equipment and personnel needed by our armed forces.

RESOLUTION 461

COMMITTEE: National Security

SUBJECT: REINSTITUTION OF INDUCTION AUTHORITY

WHEREAS, the conscription authority in the military Selective Service law expired in July 1973, and the United States began the All-Volunteer Force experiment in the same year; and

WHEREAS, neither the Active nor the Reserve forces have been able to consistently maintain their strength levels in the last seven years, and all Services were short of their recruiting goals in FY 1979; and

WHEREAS, the recruiting process is selecting many individuals who are not suited for military service; and

WHEREAS, the rate of attrition loss being experienced by the military services is unique to the All-Volunteer Forces with nearly one-third of first-term Army enlistees being separated before the end of even 24 months of service; and

WHEREAS, the cost to the taxpayers in training and paying marginal performers who leave serve before completing a first-term enlistment is enormous and one of the main reasons that the investment share of defense spending has dropped to its present level of less than one-third of the total defense budget; and

WHEREAS, since the All-Volunteer Force concept was introduced personnel costs have grown steadily and have eaten away at the muscle of our not-so-well armed forces;and

WHEREAS, the situation with respect to the Reserve and Guard forces is equally bleak with severe shortages existing in both peacetime and wartime objectives; and

WHEREAS, a fundamental obligation of all is service to country and our greatest need in this time of peril is to make our military once again a fighting force rather than a social laboratory program; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we support the reinstitution of the induction authority of the military Selective Service Act; that induction be instituted at the earliest practicable date in sufficient numbers to insure adequate manning of the armed forces, using the "lottery system" of random selection; that certified conscientious objectors be required to perform service with the military medical department for periods of service equivalent to that of military draftees; and, be it further

RESOLVED, that no deferments or exemptions be granted to the physically qualified personnel, except to: (1) those satisfactorily engaged in the pursuit of medical or dental degree and that such individuals be required to serve as military medical officers for a specified period following their certification; or (2) personnel enrolled in a Reserve Officer Training Corps program and that such personnel be obligated to serve no less than five years Active duty upon completion of such program.

RESOLUTION 463

COMMITTEE: National Security

SUBJECT: AIRLIFT CAPABILITY

WHEREAS, rapid reinforcement and world-wide mobility are major elements of the defense policy of the United States; and

WHEREAS, our mobility forces provide the means for the timely movement of people, equipment and supplies between and within theaters for initial deployment from peace time to war time locations, for sustaining support, and for subsequent movement in response to unpredictable shifts in the demands of combat; and

WHEREAS, rapid mobility is essential to deterrence and one of the most urgent requirements needed in our general purpose force structures is an increase in our total mobilization airlift capability to enhance our ability to move large scale reinforcements to those areas of the world where the vital interests of the United States are at stake; and

WHEREAS, the early projection of United States conventional power, when so ordered, can stabilize the situation if conflict has not yet erupted, can mount a better defense if it has, and most important, can offer the President an alternative between surrendering a vital national interest or crossing the nuclear threshold; and

WHEREAS, the current airlift deficiency is judged to be the greatest problem the Air Force faces in executing the national military strategy; and

WHEREAS, various proposals have been submitted through the years by the Air Force and the Defense Department to improve our strategic airlift capability, including modification of the C-141 airlift currently in the inventory, modifications to the C-5 wing and modification for defense requirements of certain commercial aircraft in the Civil Reserve Fleet; and

WHEREAS, completion of all of these enhancements will still leave a significant shortfall in our airlift capability to meet mobility requirements; and

WHEREAS, the Secretary and Chief of Staff of the Air Force have testified that the procurement of a new airlift, the C-X, is the Air Force's top priority in the mobility area; and

WHEREAS, a C-X able to carry outsize cargo over intercontinental ranges into small austere airfields offers the best solution to our world-wide force projection needs and our intra-theater airlift deficiencies; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that the Congress be urged to authorize the funds required for the development of aircraft to insure that sufficient airlift capability will be available in future years to prevent infringement upon the vital interests of the United States anywhere in the world by any potential aggressor.

RESOLUTION 465

COMMITTEE: National Security

SUBJECT: A-10 AIRCRAFT

WHEREAS, every major conflict since World War I has demonstrated the importance and necessity of effective close air support of friendly ground forces engaged in combat with an enemy force; and

WHEREAS, the A-10 aircraft has been designed specifically by the Air Force to incorporate all of the principal characteristics that are essential for close air support including maneuverability, lethality, survivability and simplicity; and

WHEREAS, its reliability and maintainability have exceeded Air Force expectations; and squadrons assigned to USAFE have succesfully operated from forward operating locations in the Federal Republic of Germany; and

WHEREAS, it is armed with a high velocity, tank-destroying 33mm GAU-8 gun, air-to-surface missiles and other ordnance all of which will make it particularly effective in Europe if required against the tanks and other armored vehicles of the Warsaw Pact ground forces; and

WHEREAS, more than 126,000 operational flight hours and joint tests with the Army have demonstrated the outstanding capabilities of this aircraft to perform close air support; and

WHEREAS, the Secretary and Chief of Staff of the Air Force have testified before Congress that the A-10 is "the best in the world" for air interdiction and close air support; and

WHEREAS, the outstanding capabilities of this aircraft would be further enhanced through modification to a two-seat configuration which could serve as a combat - ready trainer, resulting in savings both in fuel and training costs of several millions of dollars per year; and

WHEREAS, the two-seat A-10 could also be equipped to accept avionics to perform the night/adverse weather ground attack missions, thus preserving the near term option for that mission; and

WHEREAS, the Air Force has already introduced new A-10s directly into Reserve forces to accelerate total force modernization; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980 that the Administration and the Congress are urged to support the A-10 program in both the single-seat and two-seat configurations, which will insure that American ground forces engaged in any future conflicts will have the best possible close air support that our technology and economy can provide.

RESOLUTION 466

COMMITTEE: National Security

SUBJECT: F-15 AIRCRAFT

WHEREAS, the most urgent need for the tactical forces of the U.S. Air Force continues to be an air superiority fighter which can control the skies against the high quality fighters the Soviet Union and Warsaw Pact tactical air forces will have in the years to come; and

WHEREAS, attainment of air superiority is critical to the mission of tactical air warfare and the operations which it supports as control of the air permits better use of our air, ground and naval forces, while denying the enemy the opportunity to use his military capabilities effectively; and

WHEREAS, the F-15 aircraft is the first fighter which the U.S. has specifically designed in many years to excel in air-to-air combat and is the only effective all weather air defense fighter available for deterrence in NATO; and

WHEREAS, the F-15 is armed with a new medium range air-to-air missile system and an improved close-in-air-to-air missile system, as well as a 20mm gun, and is the best air-to-air fighter in the world; and

WHEREAS, the F-15 air superiority fighter program has been an outstanding success and pilots have attested to its superior handling quality and remarkeable agility and accaleration; and

WHEREAS, it is currently planned to acquire a total of 729 F-15 aircraft, with a final procurement of 30 aircraft in FY '83; and

WHEREAS, it is in the national interest to maintain this production line throughout the foreseeable future if we are to have any realistic hope of achieving and maintaining air superiority in any future conflict with Warsaw Pact nations; and

WHEREAS, the Air Force has identified the F-15 as the follow-on intercepter for a modernized air defense system capable of defending the CONUS and U.S. interests world-wide against the projected Soviet Backfire threat; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we again urge the Administration and Congress to support continued procurement of F-15 aircraft in the numbers required to insure that our Air Force will be able to achieve and maintain air superiority in any future conflict in which we may become engaged.

RESOLUTION 467

COMMITTEE: National Security

SUBJECT: F-16 AIRCRAFT

WHEREAS, the F-16 aircraft is a multi-role fighter which will augment the F-15 in the counter-air role as well as improve our air interdiction and close air support capabilities; and

WHEREAS, as the F-16 combat units become operational, this aircraft will decrease the numerical deficiencies in the fighter force, replace a portion of the older force, and will enable the Air Force to continue its modernization of the total force by freeing some F-4s for transfer to the Air Reserve forces as well as equip some Reserve units with the new F-16s; and

WHEREAS, four of our NATO allies have followed the Air Force lead and have selected the F-16 as a replacement for their aging F-104s and have entered into a cooproduction partnership with the United States and are taking delivery of F-16 aircraft, thereby providing a significant move toward broader standardization and inter-operability within the NATO alliance; and

WHEREAS, since 1975 Air Force planning for the F-16 program has been based on the eventual procurement of 1,388 aircraft produced at an efficient rate of 15 per month; and

WHEREAS, the Administration has indicated an intention to reduce the procurement rate to only 10 per month in future years which action will cause program delays, cost increases, slippages in modernization efforts, and will require the extended use of older aircraft that are more expensive to maintain and operate; now, therefore, be it

RESOLVED, by The American Legion in National Convention asssembled in Boston, Massachusetts, August 19-21, 1980, that we urge the Administration and the Congress to provide the authorization and funds required to maintain the originally planned production rate of 180 aircraft per year, thereby avoiding unacceptable delays in the modernization of our fighter force and concurrent program cost increases.

RESOLUTION 470

COMMITTEE: National Security

SUBJECT: STANDOFF PENETRATION BOMBER MIXED FORCE CONCEPT

WHEREAS, the TRIAD concept of ICBMs, SLBMs and heavy bombers has served this country well for many years and represents a reasonably conservative and well-hedged way to maintain the U.S. strategic posture and thereby deter aggression and contribute to some semblance of international stability; and

WHEREAS, the Soviet Union since the inception of detente has continued to press forward with the development of their strategic defensive forces an are conducting extensive testing to close the qualitative gap which has helped the U.S. compensate for the Soviet numerical and throw-weight advantages in intercontinental missiles; and

WHEREAS, the Secretary and Chief of Staff of the Air Force have stated in Congressional testimony that "In the coming decade, the first priority must be the modernization of our strategic forces;" and

WHEREAS, the mixed standoff/penetrating bomber concept is vital to the success of the air breathing posture of the TRIAD in that it prevents the Soviet Union from concentrating its defenses against only one type of offensive bomber threat; and

WHEREAS, the penetrating bomber has unique capabilities such as the ability to carry the short range attack missile which is invulnerable to point defense; the ability to carry large yield gravity weapons; the ability to place a man, with his capability for observation and judgment at the combat scene; the ability to carry out post strike damage assessments; and the ability to rapidly reconstitute and form a second strike force; and

WHEREAS, the penetrating bomber has the capability to be used across the full spectrum of combat from a visible show of force, through conventional warfare, to nuclear conflict; and

WHEREAS, the manned bombers currently carry more than 50% of the U.S. strategic megatonnabe; and

WHEREAS, the B-52 force, even with modifications and cruise missile carriage capabilities, is aging and will become less effective against sophisticated Soviet defenses as time goes on; and

WHEREAS, the bomber penetration evaluation program now being conducted will provide data to evaluate requirements for the manned penetrating bomber of the future; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that the Administration and Congress support the standoff/penetrating bomber mixed force concept, the completion of the bomber penetration evaluation program, and begin immediately the development of such new strategic bomber systems as may be required for deployment in the late 1980s/early 1990s to meet the future penetration and standoof requirements.

RESOLUTION 472

COMMITTEE: National Security

SUBJECT: SUPPORT OF A STRONG NAVAL RESERVE

WHEREAS, the present world crisis requires the necessary implementation of many of the U.S. Navy's programs; and

WHEREAS, due to budgetary reductions and restrictions,our coungry is failing to utilize the manpower it possesses; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that full backing be given to Navy and Congressional moves designed to more fully utilize the important services and mobilization functions of the Naval Reserve. By assigning naval Reservist to mobilization functions, such as convoy air defense and sea lane anti-submarine warfare, substantial regular forces can be freed for other military missions.

RESOLUTION 474

COMMITTEE: National Security

SUBJECT: NAVY'S ARAPAHO PROJECT

WHEREAS, the present world crisis requires the necessary implementation of many of the U.S. Navy programs which are being affected by budgetary cuts; and

WHEREAS, many of the research and development programs are being reduced and abandoned; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that every encouragement be given the U.S. Navy's Project ARAPAHO and its development of a modular, portable aviation facility operation of naval aircraft from merchant ships underway independently or in convoy and provides indigenous aircraft protection against submarines and air threats, much like WW II armed guard detachments; modern Navy helicopters and Marine VSTOL aircraft have the ability to successfully perform their respective missions from larger merchant ships, it is considered essential this capability be fully developed and demonstrated as part of a balanced, cost-effective, sea lane defense force; and, be it further

RESOLVED, every effort be made to expand indigenous air defense initiatives, such as ARAPAHO, to other critical maritime units such as the extremly large and very vulnerable tankers upon which this nation depends so thoroughly for its existence; self-contained, self-sustaining aviation facilities, installed topside on large displacement crude carriers can do much to correct the present deficits in sea control and sea-denial resources and will maximize our national defense posture; and, be it further

RESOLVED, that imaginative new ideas like ARAPAHO be carried forward from their present R&D status, that actual employment of prototype systems be conducted on the high seas in conjunction with our NATO allies; by exposing these types of initiatives to typical operational environments, a clear consensus as to their relative merit and potential can be derived, with empirical data to support the findings.

RESOLUTION 475

COMMITTEE: National Security

SUBJECT: STRATEGIC NUCLEAR POLICY

WHEREAS, the United States has considered that nuclear war would essentially spell the destruction of civilization; a view which has led us to accept a steady erosion of our military strategic strength through successive enunicated policies which have only confirmed our diminishing relative strength; and

WHEREAS, the continued acceptance of such a policy will lead us to a position of inferior strategic strength, vis-a-vis the Soviet Union, by the mid-'80s; and

WHEREAS, a strategic policy which holds our own citizens hostage to nuclear exchange in order to deter aggression lacks credibility because of the Soviet's recently developed more accurate and more powerful MIRVed ICBMs, having first strike capability; and

WHEREAS, the Soviet Union strategists have long developed their military war machine from the concept of "winning" a nuclear war; and

WHEREAS, in developing their strategic nuclear offensive capability the Soviets have emphasized their Inter-Continental Ballistic Missiles (ICBMs), and have been modernizing that force, stressing improved readiness, greater throw-weight, increased accuracy, better command and control; and

WHEREAS, they have also increased the number of re-entry vehicles, and provided hardened silos to improve survivability; and

WHEREAS, the development of new capabilities and rapid deployment of Anti-Ballistic Missiles (ABMs) including laser and other scientific breakthroughts, would enhance the survivability of our ICBMs, strategic bomber bases, defense communication sites, military facilities and the civilian populace; and

WHEREAS, at the present time the U.S. has no effective defense against an attack by Soviet strategic aircraft; and

WHEREAS, the improvement of our manned and unmanned capability to intercept and destroy Soviet aircraft and cruise missiles would appreciably add to the deterrence of enemy attack; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we adopt a new strategic nuclear policy, which will lead the U.S. to develop the needed strength to destroy Soviet strategic offensive capabilities, rather than the destruction of soft targets; and, be it further

RESOLVED, that together with the development of these new capabilities that the U.S. develop the force structure necessary to defeat the Soviet Union, while minimizing destruction to the United States.

RESOLUTION 523

COMMITTEE: National Security

SUBJECT: NATIONAL GUARD AND ARMY RESERVES

WHEREAS, the Reserve components of our armed forces are a very vital part of our national defense; and

WHEREAS, at a meeting on May 7, 1980, the 53 Adjutants General, representing National Guard units in every state and three territories, charged that they are understaffed, underfunded and unprepared for any military contingency; and

WHEREAS, such units, along with Army Reserve units, must bear nearly 60% of the nation's defense burden on mobilization; now, therefore, be it

RESOLVED, by The American Legion in National Convention assembled in Boston, Massachusetts, August 19-21, 1980, that we call upon the President and the Congress of the United States to provide the necessary funds to attract skilled reserve personnel and to adequately equip National Guard and Army Reserve units to meet their military responsibilities in time of emergencies.

BATTLESHIP REACTIVATION

Mr. **Hubbard**. We are prepared to answer any questions you may have.

Senator **Stevens**. We have a little disagreement about the battleship. The Armed Services Committee refused to authorize the *Oriskany*. I have serious questions about the battleships and what they are going to cost. We will have to wait and see. There is no question that the *New Jersey* will be refurbished. That was decided already. Whether we will go with the *Iowa* and the other one I think has to be determined on the basis of what the experience is on the cost of the first one.

Mr. **Hubbard**. I expect that is true. We must remember also though the *New Jersey* has been reactivated and updated once already during the Vietnam war. To do so with the *Iowa* initially will cost a great deal more than it will to bring the *New Jersey* out of mothballs.

Senator **Stevens**. That may be true. That has to be weighed whether it is cost effective to do that rather than start a new one. I am not convinced that anyone has really examined enough what it would cost to modify all of the larger vessels in our fleet that are in service now for purposes of carrying at least some of those missiles. Rather than putting all of them on old battleships, why don't we put a few of them on each one of the other vessels and not put all our eggs in one basket?

Mr. **Hubbard**. It seems to me that the decision for that ought to be based on what the mission is. If it is to protect sealanes all over the world perhaps that is the best route. If it is to protect sealanes between the United States and Europe and perhaps the Persian Gulf maybe it is somewhere in the middle. Everything we do in terms of spending money in the Defense Department ought to be done in the context of what is the mission.

Senator **Stevens**. I agree. The mission in the Indian Ocean seems to be in the hope of scaring the Russians away. That may seem facetious but that really is the way I see it. I used to be a member of the Commission at one time. I appreciate the work you are all doing and the time you spend in reviewing these actions.

Senator **Rudman**. I have a comment for Mr. Egan. The chairman expressed concern about the refurbishment of the older ships which I share. It is not in opposition to strengthening the Navy. The nature of the estimate that this committee has received by the Navy's own statement is a very ballpark estimate. If you want to see some real disasters, go look at some ballpark estimates in the defense area over the past 2 years. It is the kind of thing that the previous witness was talking about, that the press is talking about now constantly, that national magazines are commenting about. All of this if it proves to be true, will chip away at the very thing that we share as a mutual concern, that is, a strong consensus for national defense.

There is a special obligation of your organization and others when you are supporting programs it seems to me. It seems we ought to take a hard look at what the costs are lest we end up with a pig in a poke. I just hope that your organization and others who have been strongly articulate in support of national defense will start looking at some of these cost figures to see whether or not we are going to maintain the consensus that we need to do. I think it is terribly important.

Mr. HUBBARD. Senator Rudman, I agree wholeheartedly with your comments. We are taxpayers also. We also share the concern of the previous witness in terms of goldplating, as one term that is used frequently. We also are very much aware that the Navy has come to the Congress with a class F estimate and that is the major reason in my view that the *Oriskany* was not funded by the authorization committee. It is entirely justified in my view. They have to take a long hard look at what their mission is and what kind of dollars need to be spent in terms of accomplishing that mission.

Senator RUDMAN. Thank you.

Senator STEVENS. Thank you very much.

Mr. HUBBARD. Thank you, Mr. Chairman.

Senator STEVENS. Mr. Peirce, National Federation of Federal Employees.

NATIONAL FEDERATION OF FEDERAL EMPLOYEES

STATEMENT OF JAMES M. PEIRCE, PRESIDENT, NATIONAL FEDERATION OF FEDERAL EMPLOYEES

ACCOMPANIED BY:

GENE RAYMOND, EXECUTIVE DIRECTOR, NFFE
RON KIPKE, PRESIDENT, NATIONAL GUARD COUNCIL OF LOCALS
DAVID GUSKE, LEGISLATIVE DIRECTOR, NFFE

CONVERSION OF GUARD AND RESERVE TECHNICIAN POSITIONS

Mr. PEIRCE. I am James M. Peirce, of the National Federation of Federal Employees. On my right is Gene Raymond, executive director, who was at one time a National Guard technician; and on my left is Ron Kipke, who is president of our National Guard Council of Locals.

We would like to speak to the conversion of the National Guard and Reserve technician positions to full-time military.

I would like to summarize this.

Senator STEVENS. The whole statement will be printed in the record as though read.

Mr. PEIRCE. For over 60 years, civilian technicians have helped maintain the Guard and Reserves as an effective fighting force. Beginning with the National Guard in 1916, as each Reserve component in the Army and the Air Force became a key link in our national defense and, therefore, in need of full-time administrative training and maintenance support, civilian technicians were called upon to provide it.

The Defense Department could have assigned active-duty personnel to this critical mission, but then, as now, civilian technicians were recognized as the group best able to accomplish the task.

Today, technicians are stationed in every State and territory in the Union, at thousands of bases and armories, constantly insuring that our Guard and Reserve Forces are ready to meet any foreign or domestic crisis.

Yet, despite their proven value to the Nation, technician conversions are but the latest in a series of recent attempts to either completely abolish the civilian technician workforce or its long held right to union representation.

As you are aware, the conversions originated with the fiscal year 1979 Defense appropriations bill. The House committee report [95-1398] which accompanied the bill instructed the Army and the Air Force National Guard and Reserves to conduct a test to determine the "desirability of elimination of dual-status technicians either completely or only for certain Reserve components, cost-effectiveness of technicians versus full-time military, impact on readiness, et cetera."

CFTM TEST

The test, which became known as the conversion to full-time manning, CFTM, began in February 1979, and ended July 1, 1980. During that period nearly 5,000 civilian technician positions, almost 10 percent of the total work force, were converted to active duty.

Following completion of the test program, the Defense Department, with assistance from a private consulting firm, evaluated the results and in December 1981, presented its evaluation report to Congress.

With respect to recruitment difficulties in the blue-collar area, DOD found:

> All components reported difficulty in converting wage-grade technician positions and the Army expressed doubt about being able to convert wage-grade positions without added incentives.

With respect to readiness the report states:

> In the skilled maintenance area, an area critical to readiness, the test shows that technicians are the best alternatives. Technicians performing these functions are highly skilled and highly paid personnel who are paid what their skills demand in industry. These same personnel will not work as active-duty personnel due to salary differences.

With respect to cost/effectiveness, DOD concluded:

> The difference in cost, considering all entitlements to include retirement between a complete active-duty force or a complete * * * technician force is insignificant.

And, finally, with respect to unionization, the report states:

> Union activity has been cited as a reason for reducing the military technician program in favor of active-duty personnel who would not be unionized. Our review of the situation indicates that union involvement should not be a significant factor in determining if military technicians should be replaced with active-duty personnel. There are no substantiated incidents where union activity has affected readiness to a significant degree. It is apparent that the unions share the DOD desire to have an effective work force.

It is unfortunate that several thousand technician positions have been sacrificed and the morale of the technician workforce thrown into turmoil to prove what many of us had known from the beginning. Nevertheless, it has now been shown conclusively that civilian technicians contribute more to Guard and Reserve readiness at no extra cost than would an active-duty force.

While the Department of Defense report does not support conversions on substantive grounds, it does recommend limited conversions for another reason—civilian personnel ceilings. As the report noted:

> In practical terms, as long as technicians are counted against the civilian strength ceiling, the necessary increase in full-time support—which we believe are very important—can be achieved only by increasing active-duty strengths.

PERSONNEL CEILINGS

It would be ironic if personnel ceilings necessitated additional conversions because the ceilings would be controlled by an administration that is mounting an unprecedented buildup of our defense forces. Hence its action regarding civilian technicians and the readiness of the Guard and the Reserves would be in direct conflict with its overall defense goals.

Of course, DOD's report was completed well before this administration partially lifted the ceiling on technicians. Current civilian end strengths could accommodate additional technician hires, though not nearly the number needed to meet complete full-time support requirements.

We believe it is for this reason, more than any other, that the Department of Defense sought authority to make 3,700 further conversion in fiscal year 1981.

This has now been approved by the House and the Senate committees.

The National Guard Bureau is currently moving to implement this conversion. This action is counterproductive and contrary to results reflected by the conversion test program. Additionally, our technicians feel that signals the demise of the civilian technicians and will weaken the overall readiness of the National Guard units.

The CTM has demonstrated the superiority of the civilian technical programs over one involving active-duty programs.

Additional technician conversions would only weaken Guard and Reserve readiness at the very moment we are attempting to restore this country's full military capabilities. While DOD's reprograming requests have already been approved by the subcommittee, you should nevertheless urge the administration to completely lift personnel ceilings on the technician work force and to use this program to meet the future full-time support requirements of the National Guard and the Reserves.

Before finishing, I would like to make one further request: No one is more familiar with the impact of the CFTM than technicians in the field. Sometime ago we asked NFFE's technicians to furnish comments on the CFTM so we could incorporate them in the testimony for today's hearings.

Some of the best responses we received are enclosed with our statement. I ask that the subcommittee members and staff review them closely if they wish to truly understand the impact of conversions on Guard and Reserve readiness.

That concludes my statement. I will be happy to answer any questions.

[The prepared statement of Mr. Peirce follows:]

PREPARED STATEMENT

THE NATIONAL FEDERATION OF FEDERAL EMPLOYEES
AND
THE NFFE NATIONAL GUARD COUNCIL

Mr. Chairman and Subcommittee Members: The National Federation of Federal Employees, which represents several thousand civilian technicians in all branches of service, appreciates the opportunity to present its views on an issue of great importance to these public servants -- the conversion of technician positions to full-time military slots.

Probably few employees in history, and certainly none in the Federal sector, have been as harassed for exercising their rights as members of the American labor force as civilian technicians. Since 1977, they have been constantly threatened with either loss of employment or pay by powerful interests who no longer accept technicians' unique status as civilians serving our Nation's military needs.

For over sixty years, civilian technicians have helped maintain the Guard and Reserves as an effective fighting force. Beginning with the National Guard in 1916, as each Reserve component in the Army and Air Force became a key link in our national defense and, therefore, in need of full-time administrative, training, and maintenance support, civilian technicians were called upon to provide it. The Defense Department could have assigned active duty personnel to this critical mission. But then, as now, civilian technicians were recognized as the group best able to accomplish the task. Today, technicians are stationed in every state and territory in the Union, at thousands of bases and armories, constantly ensuring that our Guard and Reserve forces are ready to meet any foreign or domestic crisis.

Yet, despite their proven value to the Nation, technician conversions are but the latest in a series of recent attempts to either completely abolish the civilian technician workforce or its long-held right to union representation.

The first was in 1977 when Section 856 of the Defense Appropriations Bill for Fiscal Year 1978 prohibited the hiring of additional technicians beyond October 1, 1977. If it succeeded, technician positions would have disappeared after a number of years through attrition. But on June 30, 1977, by a vote of 288-19, the House removed Section 856.

Soon after came S. 274, the bill prohibiting unionization of the military. Regardless of the fact that technicians are civilian employees, they too were included in the legislation. Fortunately, the House Post Office and Civil Service Committee struck this provision when it considered the bill and Congress, with little debate, wisely agreed to the change.

Now it is technician conversions, a more subtle method than the previous two but nevertheless conceived as a way to eliminate civilian technician positions.

As you are aware, the conversions originate with the fiscal year 1979 defense appropriations bill. The House committee report (95-1398, which accompanied the bill instructed the Army and Air Force National Guard and Reserves to conduct a test to determine the "desirability of elimination of dual-status technicians either completely or only for certain reserve components, cost-effectiveness of technicians versus full-time military, impact on readiness, etc."

The test, which became known as the Conversion to Full-Time Manning (CFTM), began in February, 1979 and ended July 1, 1980. During that period nearly 5,000 civilian technician positions, almost 10 percent of the total workforce, were converted to active duty. Following completion of the test program the Defense Department, with assistance from a private consulting firm, evaluated the results and, in December, 1981, presented its evaluation report to Congress.

This subcommittee must now make a decision regarding the feasibility of future conversions. The initial vehicle for this decision is the reprogramming requests which the Pentagon has already submitted and which, unfortunately, the subcommittee has approved, giving DoD authority to convert approximately 3,700 additional technician positions during the current fiscal year. This panel, however, certainly has the power to limit conversions beyond fiscal year 1981. We hope you will exercise your authority on behalf of a strong national defense as well as the rights of several thousand dedicated Federal employees.

From the moment NFFE learned of the imminent conversions, we, and our civilian technicians, argued against them. On no less than four separate occasions before Congressional committees, and in numerous meetings with key officials, we have stated our objections and backed them up with extensive documentation. For the benefit of today's proceedings I will list the most important ones.

First, it will be difficult to recruit qualified active-duty replacements for civilian technicians. This will be especially true in the wage grade area, which comprises nearly half of the technician workforce.

Second, readiness of Guard and Reserve units will suffer drastically because of the loss of experienced full-time support personnel.

Third, rather than saving money it may actually be more expensive to maintain an active-duty force vis-a-vis the civilian technician program. NFFE demonstrated this important point last year by comparing the National Guard Bureau's cost-evaluation format for the CFTM, which was completely defective, with the format we developed from an earlier study of the issue. The comparison is attached at the rear of this statement for review by the subcommittee members. The NGB, incidentally, continued to use its format in calculating the costs of technicians versus full-time military personnel, despite the obvious fact that it was slanted heavily in favor of the latter group.

Each of these points, in themselves, should be enough to discourage technician conversions. Taken together, however, they represent an overwhelming case for the continuation, indeed, the expansion, of the technician program to meet the full-time support requirements of the Guard and Reserves.

Admittedly, NFFE's arguments were met with skepticism when first presented. This, I believe, was due largely to the persuasiveness of the National Guard Association and its allies, which had convinced several key people that union activity had seriously damaged the military effectiveness of the technician program. Since the NGA had failed in its attempt to legally prohibit unionization of technicians, it appealed to Congress to simply eliminate technicians altogether and replace them with active-duty military personnel.

* * *

NFFE has maintained all along that unionization, or more precisely, the controversy over uniforms, is the sole reason our opponents are trying to abolish all technician positions.

Although unions have represented civilian technicians for many years, it was not until 1977 that they apparently became a problem. In that year, the Federal Labor Relations Council ruled that wearing of uniforms by civilian technicians was a negotiable item under Executive Order 11491 (FLRC Report Number 120, January 19, 1977).

Several months later, the Federal Service Impasses Panel clarified the ruling by stating that when a National Guard or Reserve unit could demonstrate that wearing of uniforms was essential to its mission, civilian technicians would have to comply (Case Number 77, FSIP 18, August 26, 1977). Please note that no unit since has satisfactorily shown that wearing of uniforms is so essential.

On the surface, perhaps, the uniform issue may seem too minor to have caused such a serious reaction. Yet, the sequence of events is too closely spaced to be mere coincidence. The FLRC decision regarding uniform negotiability was issued January 19, 1977. Requests for reconsideration were denied on May 18, 1977. Section 856 of the defense appropriations bill was before the House just weeks later; then S. 274; and finally the CFTM.

Moreover, our opponents consistently fail to offer specific reasons why unionization in general impairs the ability of the Guard and Reserves to meet readiness requirements. Examples are rarely, if ever, offered of union contracts or activities which interfere with the military command structure; just broad accusations.

By law, unions are prohibited from negotiating aspects of employment which relate to the technicians' military duties. Only civilian working conditions, employment rights, and grievance procedures fall within the scope of collective bargaining agreements. In fact, NFFE would be glad to furnish the Committee with copies of its Local contracts to show that no items are included which in any way interfere with a unit's capability to carry-out its military mission. I challenge our opponents to produce evidence to the contrary.

Unions have represented civilian technicians since 1969. For eight years they worked side-by-side with management to protect and improve the technician workforce. But in 1977, unions suddenly were unacceptable. Clearly, the uniform issue -- the newly-gained right of technicians to wear an optional mode of dress during civilian duty -- was the cause. And it must be because some people saw it as the first in a possible series of steps to shift the emphasis away from civilian technicians' military responsibilities. Indeed, as one Governor remarked in his reply to NFFE's letter on this matter, "In our view, the uniform issue is merely a stepping stone from Title 32 status to Title 5 status for all Technicians. If I am forced to accept competitive Title 5 status, I will actively seek to convert the entire force to CFTM or (AFTM) as the more desirable alternative."

This is an altogether erroneous interpretation of the uniform issue. Civilian technicians are not seeking to deemphasize their military duties. They are extremely proud of their role in national defense and have no desire to minimize it. They do not even want complete freedom to choose their work clothing since their dress still must conform to a negotiated "standard of civilian attire. Civilian technicians resent having to wear uniforms simply because they are firmly committed to their primary status as civilian employees. Uniforms, with their attendant military connotations, belie this status and often create needless confusion.

Unfortunately, many unit commanders are equally adamant in their belief that civilian technicians are essentially military personnel. As such, they should wear uniforms and be subject, even when on civilian duty, to military rules and regulations.

Until 1977, the commanders prevailed because civilian technicians had no recourse in the matter. But once wearing of uniforms became negotiable, many Locals bargained successfully to abolish it as a requirement of their jobs.

As evidence of the extreme reaction to the FLRC decision, one need only look at the problems of NFFE Local 1665, the exclusive representative of civilian technicians serving the Puerto Rico Air National Guard. In the summer of 1978, the Federal Service Impasses Panel sided with Local 1665 in ruling that its civilian technicians will not be required to wear military uniforms. The Adjutant General of Puerto Rico, however, has ignored the FSIP ruling for the past three years, even though he is on tenuous, perhaps non-existent, legal grounds. NFFE has filed an Unfair Labor Practice complaint in an effort to force the Adjutant General to comply with the law, but the ULP could take another year to resolve. In the meantime, the AG still shows no sign that he is willing to obey a decision by the body established by

Congress as the last resort for settling disputes in this matter.

So it is not unionization in general that threatens civilian technicians but rather the recently gained right of technicians to negotiate through their unions on whether they must wear uniforms. Incredibly, our opponents are willing to jeopardize national defense, and an entire occupational group, over this issue.

* * *

Now that the CFTM is finished, however, and DoD's evaluation is completed, it should be clear that NFFE's concerns, rather than those of our opponents, proved far more veracious. Permit me to quote from the Defense Department report as it pertains to the arguments advanced by NFFE more than two years ago.

Wih respect to recruitment difficulties in the blue collar area, DoD found, "All Components reported difficulty in converting wage grade technician positions, and the Army expressed doubt about being able to convert wage grade positions without added incentives."

With respect to readiness, the report states, "In the skilled maintenance area, an area critical to readiness, the test shows that technicians are the best alternatives. Technicians performing these functions are highly skilled and highly paid personnel who are paid what their skills demand in industry. These same personnel will not work as (active-duty) personnel due to salary differences."

With respect to cost-effectiveness, DoD concluded, "The difference in cost, considering all entitlements to include retirement, between a complete (active-duty) force or a complete ... technician force is insignificant."

And finally, with respect to unionization, the report states, "Union activity has been cited as a reason for reducing the military technician program in favor of (active-duty) personnel who would not be unionized. Our review of the situation indicates that union involvement should not be a significant factor in determining if military technicians should be replaced with (active-duty) personnel. There are no substantiated incidents where union activity has affected readiness to a significant degree. It is apparent that the unions share the DoD desire to have an effective workforce." (emphasis added)

It is unfortunate that several thousand technician positions have been sacrificed, and the morale of the technician workforce thrown into turmoil, to prove what many of us had known from the beginning. Nevertheless, it has now been shown conclusively that civilian technicians contribute more to Guard and Reserve readiness, at no extra cost, than would an active-duty force.

While the Defense Department report does not support conversions on substantive grounds, it does recommend limited conversions for another reason -- civilian personnel ceilings. As the report noted, "In practical terms, as long as ... technician (sic) are counted against the civilian strength ceiling, the necessary increases in full-time support -- which we believe are very important -- can be achieved only by increasing (active-duty) strengths."

It would be ironic if personnel ceilings necessitated additional conversions because the ceilings would be controlled by an Administration that is mounting an unprecedented buildup of our defense forces. Hence, its action regarding civilian technicians, and the readiness of the Guard and Reserves, would be in direct conflict with its overall defense goals.

Of course, DoD's report was completed well before this Administration partially lifted the ceiling on technicians. Current civilian end strengths could accommodate additional technician hires, though not nearly the number needed to meet complete full-time support requirements. We believe it is for this reason, more than any other, that the Department of Defense sought authority to make 3,700 further conversions in fiscal year 1981.

In summary, the CFTM has clearly demonstrated the superiority of the civilian technician program over one involving active-duty personnel. Additional technician conversions would only weaken Guard and Reserve readiness at the very moment we are attempting to restore this country's full military capabilities. While DoD's reprogramming requests have already been approved by the subcommittee, you should nevertheless urge the Administration to completely lift personnel ceilings on the technician workforce and to use this program to meet the future full-time support requirements of the National Guard and Reserves.

Before finishing, I would like to make one further request. No one is more familiar with the impact of the CFTM than technicians in the field. Sometime ago we asked NFFE's technicians to furnish comments on the CFTM so we could incorporate them in the testimony for today's hearing. Some of the best responses we received are enclosed with our statement. I ask that the subcommittee members and staff review them closely if they wish to truly understand the impact of conversions on Guard and Reserve readiness.

COST EVALUATION OF THE CFTM IN SOUTH CAROLINA

Civilian Technician Costs

	Calculation by S.Carolina AG		Calculation by NFFE		Difference
Civilian Salary	$1,185,320	("average" pay + 10% surcharge for fringe benefits)	$957,930	(actual salaries + 10% surcharge for fringe benefits)	-$227,390
Reserve Pay	132,418	(average drill & training pay)	132,418	(average drill & training pay)	0
Civilian Retirement	610,560	($9,540 x 64)	215,098	(24.7% of actual pay)	- 395,462
Reserve Retirement	227,180	("average" off. & enlisted retire. x no. of pos.)	39,725	(23.2% of average drill & training pay)	- 187,455
TOTAL	$2,155,478		$1,345,171		-$810,307

Active Duty Military Costs

	Calculation by S.Carolina AG		Calculation by NFFE		Difference
Military Pay	$ 927,501	(actual composite pay)	$ 927,501	(actual composite pay)	$ 0
Military Retirement	284,002	(30.6% of composite pay)	357,088	(38.5% of composite pay)	+ 73,086
SUBTOTAL	$1,211,503		$1,284,589		+$73,086
Additional Manpower Requirements	0		217,692	(11.5 x 18,929.73)	+217,692
TOTAL	$1,211,503		$1,502,281		+$290,778

SUMMARY - Comparison of Civilian Technician vs. Active Duty Military

	Civilian Technician	Active Duty Military	Cost to Convert
Calculation by South Carolina AG	$2,155,478	$1,211,503	$ -943,975 (or -44%)
Calculation by NFFE			
Subtotal (man-for-man conversion)	1,345,171	1,284,589	- 60,582 (or -4.7%)
Total (With Additional Manpower Requirements	1,345,171	1,502,281	+ 157,110 (or +11.7%)

Evaluation of the Technician Position Conversion Program (ARNG) Chart I

Part II

Computation of Dual Status Salary for Fiscal Year 1979

ITEM	DESCRIPTION	Column 1 General Schedule	2 Wage Grade (Incl WS, WL & WG)	3 Officer	4 Enlisted	5 Total (Officer)	6 Total (Enlisted)	7 GRAND TOTAL
1	Number of GS and WG Positions Converted to Military Status	44	20					
X2	TIMES(X) Average Annual Civilian Salary Per Person	$17775.00	$20161.00					
=3	EQUAL(=) Total Average Annual Salary	$782,100	$403,220					
4	Number of ITEM 1 Who Held OFFICER Reserve Status			10				
+5	Number of ITEM 1 Who Held ENLISTED Reserve Status				54			
=6	TOTAL Columns 3 and 4					10	54	
X7	TIMES(X) Average Drill Pay Per Person (for 48 drills)			$2635.00	$1169.00			
+ITEM 6 X8	TIMES(X) Average Annual Training Per Person (for 15 days annual training)			$1146.00	$ 583.00			
=9	EQUAL(=) Total for Drill Pay and Annual Training					$37,810	$94,608	
	TOTAL ITEM 3 (Column 1 & 2) PLUS ITEM 9 (Column 5 &6)							$1,317,738

* NOTE: Average annual civilian salaries (Columns 1 and 2) have been increased by 10% to include fringe benefits.

Evaluation of the Technician Position Conversion Program (ARNG & USAR) Chart II

Part II

Computations of Dual Status Annuity/Retirement for Fiscal Year 1979

ITEM	DESCRIPTION	Column 1 Total Civil Service Positions Converted	2 Officer	3 Enlisted	4 Total Officer	5 Total Enlisted	6 Grand Total
1	Number of Dual Status Positions Converted to Military Status	64					
X2	TIMES(X) Average Federal Civil Service Annuity	$954000					
=3	EQUAL(=) Total Average Annual Annuity	$ 610,560					
4	Number of Civilian Positions Converted to OFFICER Status		10				
X5	TIMES(X) Average OFFICER Reserve Component Retirement		$614000				
=6	EQUAL(=) Total Average Annual OFFICER Retirement				$ 61,400		
7	Number of Civilian Positions Converted to ENLISTED Status			54			
X8	TIMES(X) Average ENLISTED Reserve Component Retirement			$307000			
=9	EQUAL(=) Total Average Annual ENLISTED Retirement					$ 165,780	
	Total ITEM 3 (Column 1) Plus ITEM 6 (Column 4) Plus ITEM 9 (Column 5)						$ 837,740

Evaluation of the Technician Position Conversion Program (ARNG & USAR) — Chart III

Part II

Computation of Military Salary for Fiscal Year 1979

		Column										
ITEM	DESCRIPTION	1 E-1	2 E-2	3 E-3	4 E-4	5 E-5	6 E-6	7 E-7	8 E-8	9 E-9	10 Total	Grand Total
1	Number of Civilian Positions Converted to Military ENLISTED Status by Grade	___	___	2	5	18	20	9	___	___	54	
X2	TIMES(X) Composite Standard Rate for Costing Military Personnel Services	$694500	$782200	$856300	$958000	$1136800	$1351300	$1624700	$1902400	$2281400	$___	
=3	EQUAL(=) TOTAL ENLISTED SALARY	$___	$___	$17,126	$47,900	$204,624	$270,260	$146,223	$___	$___		$686,133
4	Number of Civilian Positions Converted to Military WARRANT OFFICER Status by Grade	W-1 1	W-2 ___	W-3 1	W-4 1						3	
X5	TIMES(X) Composite Standard Rate for Costing Military Personnel Services	$1523000	$1756000	$2073400	$2593200						$___	
=6	EQUAL(=) TOTAL WARRANT OFFICER SALARY	$15,230	$___	$20,734	$25,932							$61,896
7	Number of Civilian Positions Converted to OFFICER Status by Grade	O-1 ___	O-2 ___	O-3 4	O-4 2	O-5 1	O-6 ___				7	
X8	TIMES(X) Composite Standard Rate for Costing Military Personnel Services	$1324200	$1760300	$2286000	$2744800	$3313600	$4077500				$___	
=9	EQUAL(=) TOTAL OFFICER SALARY	$___	$___	$91,440	$54,896	$33,136	$___					$179,472
	GRAND TOTAL											$927,501

Note: Composite Standard Rate for Costing Military Personnel Services are for FY 79; prescribed by AR 37-100, Chapter 17; and are revised annually

Evaluation of the Technician Position Conversion Program (ARNG & USAR)

Chart IV

Part II

Computation of Projected Retirement for Full-Time Military Personnel

		Column					
ITEM	DESCRIPTION	1 Civil Service Positions	2 Officer	3 Enlisted	4 Total Officer	5 Total Enlisted	6 Grand Total
1	Number of Dual Status Positions Converted to Military Status	64					
2	Number of Civilian Positions Converted to OFFICER Status		10				
X3	TIMES(X) Average Projected OFFICER Retirement		$767500				
=4	EQUAL(=) Total OFFICER Retirement				$76,750		
5	Number of Civilian Positions Converted to ENLISTED Status			54			
X6	TIMES(X) Average Projected ENLISTED Retirement			$383800			
=7	EQUAL(=) Total ENLISTED Retirement					$207,252	
	Total ITEM 4 (Column 4) Plus ITEM 7 (Column 5)						$284,002

NOTE: Projected retirement figures (Columns 2 and 3) are 25% higher than the average FY 79 Army Reserve Component retired pay to compensate for estimated additional retired pay liability resulting from conversion of positions from civilian to military status.

Evaluation of the Technician Position Conversion Program (ARNG & USAR)

Part II

Cost Summary

Chart V

	Salary	Retirement	Total
Dual Status	$1,317,738 (from Chart I)	$837,740 (from Chart II)	$2,155,478
Full-Time Military	$927,501 (from Chart III)	$284,002 (from Chart IV)	$1,211,503
Difference			$943,975
Remarks			Dual Status/Full-Time Military (Circle One) is more/less (Circle One) Costly

LETTER FROM IVAN L. BROOKBANK, PRESIDENT, LOCAL 1050

NATIONAL FEDERATION OF FEDERAL EMPLOYEES

P. O. BOX 756
MITCHELL, SOUTH DAKOTA 57301

18 January 1981

Mr. James M. Peirce, President
National Federation of Federal
Employees
1016 16th St., N. W.
Washington, D. C. 20036

Dear President Peirce:

First of all, let me thank you for the vigorous efforts you have directed toward the future of the civilian technicians in the National Guard. I will endeavor to present some points from our position here in South Dakota that, hopefully, will help in our continued fight on this matter.

I do not think that it would be possible to find anyone that does not feel that the civilian technicians have done a commendable job down through the years. It is a shame that a small collection of high ranking officers and retired officers, supposedly representing the National Guard Officers Association, can have such a detrimental affect on the lives of the civilian technicians.

One point that should be dwelled upon is the fact that the National Guard Technicians have been kicked around long enough. For a number of years we did not know what our status really was. The Federal Government did not claim us and we were not considered state employees in many states. All anyone could ever tell us was that we were so-called "state employees paid by federal funds". We were not afforded either state or federal benefits. Then in 1969, when we were given civil service status, we started to breathe easy thinking we finally had been accepted into federal service and had a future. This status had been a desirable status until the National Guard Officers Association decided that they should eliminate the unions.

Since the introduction of SB 274 approximately five years ago, the civilian technician has been thrown right back into the "pool of turmoil" and I might add, it is taking its toll. The constant stress that the civilian technician has been subjected to is considered inhumane. It is bound to show up in the health conditions of many of the technicians. The fact that our future is so unstable, coupled with the fact that we are subject to immediate callup, definitely puts us in a position that is not desirable. A point of fact along this line. We have already had one technician that was given civil service disability from a heart attack because his doctor proved that his heart attack was brought on by stress from his civilian technician service. It is, in every respect, conceivable that there may be more of this in the future, in some cases, brought on by the turmoil of uncertainty in the technician status.

In reviewing the report that was submitted to the committee on appropriations by the Department of Defense, it was obvious to me that the DoD is not even aware of the various programs presently in existence in the National Guard. For example, I feel that they are confusing the AFTM program with the CFTM program. In reality there is no connection in the two programs. The report pointed to the fact that the Guard was able to fill the allocated slots with highly qualified personnel. This is not entirely the situation here in South Dakota. They were, in fact, able to fill, not their goal, but their requirements. The quotas were not leveled as goals, but as required mandates. Consequently some of the positions were filled with people that were not adapted to or qualified for the positions that they were accepted for. Consequently it has caused a turnover in the field that was not necessary.

Other problems observed were, in many cases, where high ranking NCO's were hired to fill positions that were GS-4 positions. One point in fact, an individual was hired as an E-7 with over 26 years. His wages were more the day he started than his immediate supervisor who has over 27 years as a technician and is in a GS-7 position. This inequity is taking place in many situations. This really causes hard feelings in the program when a person has worked for years to attain his position and all of a sudden he finds someone new in the program making more money than he makes. I am sure there are many such instances as I have just cited.

In summation I would like to point out that the technicians have been a very reliable work source in the past. Even management officials in South Dakota are afraid that the CPTM is going to ruin a good technician program. The feeling of the technicians in South Dakota is "PLEASE JUST LEAVE US ALONE FOR AWHILE AND QUIT TRYING TO MAKE SO-CALLED IMPROVEMENTS IN THE GUARD READINESS AT THE EXPENSE OF A DEDICATED WORK FORCE. WE HAVE ALWAYS, AND WILL IN THE FUTURE, DO AN OUTSTANDING JOB FOR THE GUARD AS CIVIL SERVICE TECHNICIANS".

I would recommend that all converted slots revert back to civil service technicians at the end of each two year tour and leave well enough alone. We are tired of our roller coaster ride and want to settle down.

Sincerely,

Ivan L Brookbank
Ivan L. Brookbank, President
NFFE Local 1050

LETTER FROM MAURICE E. CORMIER, PRESIDENT
WISCONSIN STATE COUNCIL NFFE

James M. Pierce, President
NFFE
1016 16th Street, N.W.
Washington, D.C. 20036

Dear Mr. Pierce:

May the following opinions on the Defense Department's Report on the conversion to Full-time Military (CFTM) Test Program submitted to Congress 31 December 1980 help you and NFFE prove the report is incomplete and not accurate. (REF: NFFE Letter NG-DG-01 Dated 8 January, 1981)

1. All Thru the report The Reserve Forces are seperated as ARNG, USAR, ANG, USAFR but come to page 7 under Unions they list Army and Air National Guard together as plain National Guard. Representing the Wisconsin Air National Guard I would like to know what problems the Unions had with the Air National Guard.

2. Also under Unions the report does not list any help the Union has provided in achieving the most talented and qualified Air National Guard in history. One example of Union aid: How many times since the Air National Guard has had a Union that a unhappy employee has gone to the Union believing he/she had a valid complaint against their supervisor when in reality they only had a personality conflict. Having their complaints heard and judged by their peers the worker returns back to work no longer mad at their supervisor, Air National Guard or the Guard's mission. Without the Unions these employees would have been unhappy for days if not weeks while performing highly technical work.

3. The Air National Guard's record prior to the CFTM Test Program speaks for itself. The civilian work force has made what the Air National Guard is today and not Active Duty Personnel.

4. This report does not tell a true picture of how Title 32 Personnel feel about their future. The program is less than two years old. Most CFTM personnel on board since the Test Program began became CFTM Personnel because they were out of work and were looking for jobs of any kind. Now since the novelty of collecting a steady pay check has worn off. the true picture of the CFTM status is starting to emerge. When first starting out as CFTM most personnel demonstrated ambition, zeal and dedication but now realizing that most of them do not stand a chance of advancing, to a higher military grade for at least eight (8) to twelve (12) years many are complaining and are trying to transfer to different shops/sections with the hope of military advancement. What kind of Air National Guard will we have say four years from now with CFTM personnel still unhappy about their lack of military advancement? This lack of military advancement has really hurt the active services and I would hate to see it happen to the Air Technician program.

5. Military leave given to CFTM personnel is causing a very serious morale problem among the technician work force. It appears to be awful unfair for a for a technician who has been a dedicated technician for over 14 years to recieve a 160 hours (20 Days) annual leave per year while his "CFTM" co-worker who has been on board full time less then two years should recieve 240 Hours (30 Days) annual leave per year.

6. Technicians feel we should all have the same work conditions. By mixing CFTM personnel and technician personnel each set of workers performing the same job requirement have two (2) different sets of regulations,Manuals and pamphlets,etc to operate and fuction by causes a lot of "heartburn". Like the old saying "Do not mix apples with oranges."!

7. NFFE's goal should be to gid rit of Title 32 personnel and shoot for tha authorized air technician manning.

Maurice E. Cormier

Maurice E. Cormier,President
Wisconsin State Council NFFE

LETTER FROM RICHARD E. SNOW, PRESIDENT

LOCAL 1724, WEST JORDAN, UTAH

James M. Peirce
President
National Federation of Federal Employees
1016 16th Street N.W.
Washington D.C.

Re: NG-NG-01

Dear President Peirce:

I have listed below information I hope will be helpful to N.F.F.E. in preparing testimony for congressional hearing's on the conversion to full-time military (CFTM). They are as follows:

1. (Qualifications of individuals selected). It would seem to me that if qualifications are essentially the same then why was it that as soon as they could not find enough people to fill CFTM positions that the Qualification

Requirements were lowered to help recruit new employees. Please see Enclosure #1 and 2. I have seen at least one aircraft mechanic hired right back from his six month training and this is being done in other job descriptions. As a National Guard Technician I cannot see how this man and others like him can train part time Guardsmen when they are very much in need of training themselves. The training that these people need also takes time out of the technicians full time job. How long will it be before the National Guards equipment and reputation is in the same sad shape as the active army.

2. (Cost Savings). I have put together a list of all CFTM positions in the Utah National Guard (Army) see #3. I think that the comparison of their military rank to what their job would be as a technician speaks for itself. In most cases the CFTM receives more in base pay then he or she would in wages as a GS or WG employee, then add all of the extras which are not even taxable. The CFTM in this state are given promotions because as I have been informed that is their "bread and butter", therefore furthering the friction between technicians and CFTM employees, which in most cases the technician has longevity.

Concerning labor issues, their appears to be a lack of mangerial skills in dealing with labor organizations in the Army National Guard. It appears that the Army Guard is using labor disputes as a crutch to hide their incompetence to deal with what are probably minor issues that could have been settled locally. Concerning military readiness and unions, the unions, by law, cannot interfere with military status, i.e. unionization of the military, thus another crutch.

In conclusion, if the Department of Army and Department of Defense feels the need to convert technician jobs to CFTM and AFTM, the readiness of the Guard surely will be adversely affected by lowering the experience levels needed to adequately train part time Guardsmen. If you need additional comments and/or help please contact me.

Fraternally,

Richard E. Snow

Richard E. Snow
President
Local 1724

Enclosures

DEPARTMENTS OF THE ARMY AND THE AIR FORCE
NATIONAL GUARD BUREAU

TECHNICIAN POSITION DESCRIPTION

1. COMPONENT: ARNG
2. NUMBER IA'S:
3. JOB NUMBER: ~~848-67-30~~
4. APPOINTMENT REQUIREMENTS: ☒ EXCEPTED ☐ COMPETETIVE ☐ OFF ☐ WO ☒ ENL
5. CLASSIFIED BY:
6. DATE: 5/27/7
7. OFFICIAL TITLE: Aircraft Mechanic
8. PAY PLAN: WG
9. OCC CODE: 8852
10. GRADE: 11
11. ORGANIZATION AND LOCATION: AASFs and AAFAs, Various States
12. IF THIS POSITION REPLACES ANOTHER *(i.e. change of duties in an existing position)* IDENTIFY POSITION BY TITLE, ALLOCATION, *(service, series, grade)*, AND POSITION NUMBER: New Position

I. OCCUPATIONAL REQUIREMENTS: INCUMBENT IS SUBJECT TO UNCOMMON TOURS OF DUTY, ROTATIONAL SHIFT ASSIGNMENT AND OVERTIME DUTY, FOR WHICH COMPENSATORY TIME OFF WILL BE GRANTED. MAY BE REQUIRED TO FLY IN MILITARY OR COMMERCIAL AIRCRAFT FOR TOY PURPOSES.

II. THE FOLLOWING DUTIES, RESPONSIBILITIES, AND QUALIFICATION REQUIREMENTS CONSTITUTE MINIMUM REQUIREMENTS FOR SUPPORT OF THIS JOB:

III. INTRODUCTION:

This position is located in the Aircraft Maintenance Section of an Army Aviation Support Facility and an Army Aviation Flight Activity. Its primary function is to serve as flight line crew chief over the overall maintenance servicing, cleanliness and record keeping for one or more aircraft.

IV. DUTIES AND RESPONSIBILITIES:

1. Maintains and makes complete check-out of the total aircraft and troubleshoots any or all systems. This includes monitoring and performing maintenance during preflight, postflight, supplementary postflight, periodic, hourly and special inspections, as well as during defueling, servicing and unscheduled maintenance on one or more assigned aircraft. Works with technicians either assigned or dispatched to perform specific work on assigned aircraft.

2. Conducts ground functional tests of turbine and piston engines on fixed and rotary-wing aircraft to detect the source and cause of malfunctions. Tests may be conducted on aircraft after completion of operational use or after overhaul, repair, DA modification work orders or major preventive maintenance inspections. Tests normally involve a complete check-out of the total aircraft and are conducted prior to flight test and training or service missions.

3. Responsible for rigging and adjusting flight controls, fuel controls and related engine components. Checks hydraulic, pnuematic, fuel, oil and deicing systems and inspects operation of other components as they inter-relate to the total aircraft system.

4. Diagnoses pilot comments (verbal or written) regarding deficiencies in aircraft performance. Operationally checks, troubleshoots and/or repairs aircraft system(s) and associated mechanisms by connecting, adjusting, and operating test equipment. Documents deficiencies, malfunctions, and repairs required to return the aircraft to serviceable condition. Accomplishes repairs and/or refers to appropriate specialists (e.g., avionics, sheetmetal, etc.) together with opinion concerning probable cause, for maintenance action.

5. Checks and certifies that aircraft engines and other systems are operationally ready for flight after malfunctions are corrected. Certifies that inspection, maintenance and/or repairs have been accomplished, within prescribed parameters of The Army Maintenance Management System (TAMMS).

6. May be authorized to start and run up rotary-wing and/or fixed-wing aircraft to perform operational tests. Accompanies pilot during flight to locate discrepancies that are not evident during ground operation. Maintains and makes complete checkout of the total aircraft and troubleshoots any or all systems using live aircraft engine power as authorized and required.

7. Performs other duties as assigned.

V. SUPERVISORY CONTROLS:

Work is performed under general supervision. Assignments are given in the form of work orders, inspection reports, or verbal instructions. Incumbent is expected to plan work sequences, select tools and repair parts and otherwise carry assignments through to completion, referring only unusual and difficult problems to supervisor. Work is subject to spot check upon completion for acceptability and adherence to instructions and established standards. Published guidance includes technical manuals, manufacturer's specifications, factory engineering bulletins and standard operating procedures.

VI. WORKING CONDITIONS:

Works inside and outside, in inclement weather, on icy, wet, and slippery ramps and work stands in temperature and humidity extremes. Work areas may be drafty, noisy and have toxic fumes present. Irritants such as aircraft fluids, dirt, grease, dust and paint may be present. Exposure to cuts, burns, shock, strains and broken bones exist.

* (NGB-TNC Letter 77-32--Aircraft Fire/Crash Rescue Duties--11 March 1977)

May be required to assist authorized firefighters in the performance of fire/crash rescue duties on an as needed basis.

VII. QUALIFICATION REQUIREMENTS:

1. Education/Experience: Three (3) years of progressively difficult experience in aircraft maintenance and repair, including the ability to diagnose, analyze, and identify malfunctions to determine propable source and cause of trouble for guidance of other mechanics in making repairs. Must have a thorough knowledge of the operational characteristics of fixed and/or rotary wing aircraft systems, to include a comprehensive understanding of principles of turbine and piston engines, powertrain, prop and rotor systems as they relate to characteristics of flight. Must also possess a thorough knowledge of the various aircraft systems operating under live engine power in order to diagnose malfunctions. Must be able to identify malfunctions which require the services of other skilled aircraft specialists.

2. Military: TOE/TDA assignment in any enlisted ARNG position in State (Preferably in an aviation unit). Qualified in any MOS at the 2 skill level within Career Group 67 - Aircraft Maintenance or Career Group 68 - Aircraft Components Repair. Completion of Formal MOS course or equivalent.

TECHNICIAN VACANCY ANNOUNCEMENT

HEADQUARTERS UTAH NATIONAL GUARD
Office of the Adjutant General
Post Office Box 8000
Salt Lake City, Utah 84108
(1543 Sunnyside Ave., Rm 209)

TECHNICIAN PERSONNEL OFFICE
533-6350 ext 42 — 47

ANNOUNCEMENT NUMBER
☒ ARMY
☐ AIR 80-26

DATE
28 February 1980

APPOINTMENT REQUIREMENTS:
EXCEPTED ☒ Military x
Officer ☐ Enlisted ☒
Warrant ☐

COMPETITIVE ☐
(No National Guard Membership req)

POSITION TITLE, SERIES, AND GRADE
Aircraft Mechanic
WG-8852-11

PDCN
R6738100

ANNUAL SALARY
$17,534.40 to $20,446.40
OR MILITARY GRADE

LOCATION OF POSITION
Army Aviation Support Facility
West Jordan, Utah

OPENING DATE
28 February 1980

CLOSING DATE
13 March 1980

MILITARY REQUIREMENTS AND OTHER SELECTIVE PLACEMENT FACTORS:

Position may be filled in either a MILITARY or TECHNICIAN status by technicians presently employed by the Utah National Guard. Priority consideration will be given to on-board technicians who are considered FULLY qualified (as outlined in the attached position description qualifications requirements.)

Applicants not presently employed by the Utah Army National Guard will be considered in MILITARY status only.

Applicants applying in a military status will submit an SF 171 and UTNG Form 1011. All applicants must indicate present unit of assignment, military grade, and MOS if currently assigned to a military organization. Also, indicate any MOS's/AFSC's previously awarded, unit(s) of assignment, military grade and other pertinent military experience & education.

Wearing of the prescribed uniform is required and acceptance constitutes concurrence with this requirement as a condition of employment.

Prior to employment, any individual selected for this position must be a member of the Utah Army National Guard and be qualified for assignment in Atk Hel Troop 163rd ACR within CMF 67 or MOS 192.

SELECTING SUPERVISOR: MAJOR RICHARD N. MILLER, Aircraft Pilot Supervisor
VICE: Dee Wilkinson, resigned

DUTIES AND RESPONSIBILITIES: The basic duties and responsibilities are described on the attached Position Description.
QUALIFICATIONS REQUIREMENTS: The qualification requirements are indicated in the attached Position Description. These qualification requirements must be met in addition to the military requirements and selective placement factors indicated above in order to be considered qualified for this position.
MILITARY SERVICE: Active military experience and Reserve Component Service is important qualifying experience creditable in evaluating applications. Indicate this experience in an appropriate block on the SF 171 in addition to other experience acquire.
EQUAL OPPORTUNITY: The Utah National Guard is an Equal Opportunity Employer. Selection for this position will be made without regard to race, religion, color, age, sex, national origin, political affiliation, marital status, membership or non-membership in an employee organization, or any other non-merit factor.
INSTRUCTIONS FOR APPLYING: Individuals who meet the basic qualification requirements may apply by submitting a Standard Form 171. (Std Form 172 may be used if there is a current SF 171 in the applicant's Official Personnel Folder) Under P.L. 90-486, veteran preference is not applicable. Applicants currently employed by the Utah National Guard will submit a Utah NG Form 7003, properly signed by the candidate and appraiser. Submit application by 1630 hrs on closing date to: P.O. Box 8000, Salt Lake City, Utah 84108 or deliver to 1543 Sunnyside Ave, Rm 209.

POSITION DESCRIPTION *(Please Read Instructions on the Back)*

R6738100

☒ ☐ ☐ ☐ ☒

R6738000, Acft Mech,
WG-8852-11

☒ Exempt ☐ Nonexempt

☐ Competitive
☒ Excepted (Specify)
32 USC 709

☐ Yes ☐ No

☐ Supervisory
☐ Managerial
☒ Neither

☐ Critical
☐ Noncritical
☐ Nonsensitive

☒ Yes ☐ No

Enl

	Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
a. Civil Service Commission						
b. Department, Agency or Establishment						
c. Bureau						
d. Field Office	Aircraft Mechanic	WG	8852	11	N/M	3-6-79
e. Recommended by Supervisor or Initiating Office						

National Guard Bureau

State Adjutant General

State Aviation Office

Army Aviation Support Facility/
Army Aviation Flight Activity

Aircraft Repair

RICHARD W. MILLER
Supervisory Aircraft Pilot
Richard W Miller
7 Dec 79

JOHN O. STANKO, JR.
Chief, Aviation Division, Army National Guard
19 Jan 79

LLOYD H. T. JOHNSON
Chief, Compensation & Classification Div
6-19-79

Job Grading Standard for Aircraft Mechanic,
WG-8852, Feb 1969.

Incumbent is subject to uncommon tours of duty, rotational shift assignments and overtime duty, for which compensatory time off will be granted. May be required to fly in military or commercial aircraft for TDY purposes. Incumbent must be assigned to a compatible military position in one of the following MOS/CMF specialties:

In aviation units, the following MOSs are compatible when the technician is serving as first sergeant or detachment sergeant; 91B in ambulance units, 19Z in air cavalry units - headquarters troop, air cavalry troop, air cavalry regiment, 96D in military intelligence company aerial surveillance.

25.

a. INTRODUCTION:

The purposes of this position are to exercise overall maintenance, servicing, cleanliness, and record-keeping responsibility for one or more assigned aircraft; to conduct standardization training; and to perform required pre-flight, in-flight, and post-flight operational duties.

b. DUTIES AND RESPONSIBILITIES:

(1) Maintains and makes complete check-out of the total aircraft and troubleshoots all systems. This includes monitoring and performing periodic, hourly, and special inspections and defueling and servicing operations. Conducts ground functional tests of all aircraft systems, including turbine and piston engines, and rigs and adjusts flight controls, fuel controls, and related engine components prior to and during flight tests. May be authorized to start and run up rotary-wing

and/or fixed-wing aircraft to perform operational tests using live aircraft engine power as authorized and required. Accompanies pilot during flight to locate discrepancies that are not evident during ground operation. Certifies that inspection, maintenance, and repairs have been accomplished within prescribed parameters. Diagnoses written and verbal pilot comments regarding deficiencies in aircraft performance. Operationally checks, troubleshoots and repairs aircraft system(s) and associated mechanisms by connecting, adjusting, and operating test equipment. Documents deficiencies, malfunctions, and repairs required to return the aircraft to serviceable condition. Accomplishes repairs and modifications or refers for maintenance action to appropriate specialists (e.g., avionics, sheetmetal, etc.) together with documentation. Performs authorized major modifications within assigned functional area as directed by higher technician authority.

(2) Plans and conducts a flight training program for drill status crew chiefs which includes instruction and evaluation in maintenance of assigned aircraft, use of authorized arm and hand signals, ground handling of aircraft, use of ground equipment, techniques of refueling and rearming aircraft, forms and records, passenger briefings, aircraft loading, sling loads, hoist operations, observer duties, litter installation, and emergency procedures affecting flying safety. Performs on-the-job training as required and evaluates training effectiveness.

(3) Performs such duties as aircraft loading, passenger briefings, sling load and hoisting operations, observer duties, litter installation, clearance of aircraft into and out of confined areas and pinnacle operations, operation of applicable flight control panels, and emergency procedures as necessary. Performs required pre-flight, in-flight, and post-flight inspections and related maintenance actions required to preserve the operational status of the aircraft. Performs such travel as may be required in the accomplishment of assigned duties and the organizational mission.

(4) May assist authorized firefighters in the performance of fire/crash rescue duties on an as needed basis.

(5) Performs other duties as assigned.

c. SUPERVISORY CONTROLS:

Work is performed under general supervision of the Foreman. Assignments are given in the form of work orders, inspection reports, or verbal instructions. Incumbent is expected to plan work sequences, select tools and repair parts, and otherwise carry out assignments through to completion with a minimum amount of supervision, referring only unusual and difficult problems to supervisor. Work is subject to spot check upon completion for acceptability and adherence to instructions and established standards and to no-notice flight checks and written examination. Receives guidance from technical manuals, manufacturer's specifications, factory engineering bulletins, flight operation manuals, safety bulletins, and standard operating procedures.

d. WORKING CONDITIONS:

Works inside and outside, in inclement weather, on icy, wet, and slippery ramps and work-stands in temperature and humidity extremes. Work areas may be drafty, noisy and have toxic fumes present. Irritants such as aircraft fluids, dirt, grease, dust, paint, and solvents may be present. Exposure to cuts, burns, shock, strains, and broken bones exists.

e. PHYSICAL EFFORT:

Required to climb, stand, stoop, bend, stretch, and work in tiring and uncomfortable positions. Frequently lifts parts and equipment weighing up to 20 pounds. Occasionally lifts and carries items weighing 50 pounds and over.

f. OTHER SIGNIFICANT FACTORS:

Eligible for NGB Non-Aviator Flying Status. Must be qualified for Class III flying duties.

g. QUALIFICATION REQUIREMENTS:

Progressively responsible experience in aircraft maintenance and repair, including the ability to diagnose, analyze, and identify malfunctions to determine probable source and cause of trouble. Must have a thorough knowledge of the operational characteristics of fixed and/or rotary wing aircraft systems, to include a comprehensive understanding of principles of turbine and piston engines, powertrain, prop and rotor systems as they relate to characteristics of flight. Must also possess a thorough knowledge of the various aircraft systems operating under live engine power in order to diagnose malfunction. Must be able to identify malfunctions which require the services of other skilled aircraft specialists.

CFTM POSITIONS IN THE UTAH NG

1.	Admin Officer	142 MI BN	LTC	GS-10
2.	Mil Pers Technician	142 MI BN	[illegible]	GS-7
3.	Training Technician	142 MI BN	[illegible]	GS-9
4.	Opn Training Read Spec	142 MI BN	SGT	GS-7
5.	Admin Officer	144th Evac Hosp	[illegible]	GS-10
6.	Admin Officer	1/140 FA	MAJ	GS-10
7.	Training Tech	1/140 FA	[illegible]	GS-9
8.	Training Tech	1/145 FA	[illegible]	GS-9
9.	Admin Officer	2/222 FA	[illegible]	GS-10
10.	Training Tech	2/222 FA	[illegible]	GS-9
11.	Admin Officer	1/19 SFGA	[illegible]	GS-10
12.	Training Tech	1/19 SFGA	[illegible]	GS-9
13.	Supply Clerk	115 Hvy Maint Co	[illegible]	GS-5
14.	Mil Pers Clerk	142 Co A		GS-5
15.	Unit Administrator	142 Co B	[illegible]	GS-5
16.	Unit Administrator	142 Co C Det 1	[illegible]	GS-5
17.	Supply Clerk	163 AHT	[illegible]	GS-5
18.	Mil Pers Clerk	163 AHT	[illegible]	GS-5
19.	Mil Pers Clerk	HHB XICA	[illegible]	GS-5
20.	Mil Pers Clerk	1/140 FA	[illegible]	GS-5
21.	Unit Admin	1/140 FA	SP5	GS-5
22.	Unit Admin	A/1/140 FA	1SG	GS-7
23.	Unit Admin	C/1/140 FA	SSG	GS-7
24.	Mil Pers Clerk	1/145 FA	SP5	GS-5
25.	Unit Admin	B/1/145 FA	SSG	GS-7
26.	Mil Pers Clerk	115 Engr Gp	SP5	GS-5
27.	Mil Pers Clerk	1457 Engr Bn	SP5	GS-5
28.	Mil Pers Clerk	1457 Engr Bn	SP5	GS-5
29.	Unit Admin	Det A/1457 Engr Bn	SP4	GS-7
30.	Unit Admin	A/1/19 SFGA	MSG	GS-7
31.	Gen Mech	OMS 3	SGT	WG 9
32.	Gen Mech	OMS 3	SSG	WG 9
33.	Gen Mech	OMS 4	SGT	WG 9
34.	Gen Mech	OMS 6	SSG	WG 9
35.	Supply Tech	OMS 7	SFC	GS 6
36.	Supply Tech	OMS 8	SGT	GS 6
37.	Gen Mech	OMS 8	SSG	WG 9
38.	Org Maint Off	SMO	CPT	GS 11
39.	Mang. Assistant	SMO	SFC	GS 7
40.	Gen Supply Assist	CSMS	SSG	GS 5
41.	Tool & Parts Attend	CSMS	SSG	WG-5
42.	HME Mech	CSMS	SSG	WG-10
43.	HME Mech	CSMS	SGT	WG-10
44.	Artillery Repairer	CSMS	SGT	WG-9
45.	Supply Tech	UTES	SGT	GS-6

46.	Aircraft Mech	AASF SGT	WG 11
47.	Aircraft Mech	AASF SGT	WG 11
48.	Pneudraul System Mech	AASF SSG	WG 10
49.	Prop and Rotor Mech	AASF SGT	WG 10
50.	Avn Admin Clerk	AASF SSG	GS 5
51.	Supply Tech	AASF SSG	GS 6
52.	Supply Tech	AASF SSG	GS 6
53.	Mil Pay Clerk	USP&FO SP5	GS 5
54.	Clerk Typist	USP&FO SP5	GS 4
55.	Warehouse Worker	USP&FO SFC	WG 5
56.	Warehouse Worker	USP&FO MSG	WG 5
57.	Enlisted Mil Pers Adv	HHD E-9	GS 9
58.	Mil Pers Clerk	HHD SSG	GS 4
59.	Clerk Typist	HHD SP4	GS 4
60.	Training Tech	HHD SFC	GS 8
61.	Plans & Opns Spec	HHD 2LT	GS 8

CHANGE IN PAY SCALES

Senator STEVENS. I am concerned about that. I do think that the change in pay scales, though, is going to have some impact. We had the pay raise for the military last year, 5.3 percent, which we think will go into effect now. We have another one this fall of 9.1 percent.

The civilians have been capped at 4.8. They did not get the 5.3. Last year they got less than the military. I think the pressure for conversions is going to come from the pay scale, rather than go against it. Have you looked at that problem?

Mr. PEIRCE. We have, Mr. Chairman. I will make one comment and leave it open to Mr. Kipke, on my left.

In the test program we saw a difficulty in actually recruiting full-time military to the technician level position. We weren't getting qualified technicians. This is what is important to the readiness state of those units.

It is true there is going to be an increase, but because I think of the dual status in effect, that there are some benefits on the civilian technician side as far as the dual status of it, I don't think it would directly impact on the recruitment of our civilian technicians.

CONTINUATION OF TECHNICIAN PROGRAM

Mr. KIPKE. We have not been having trouble getting technicians at all. The difficulty is getting positions to fill. The people whom we have been getting, we don't feel they are necessarily competent as technicians. The technician has usually more than one military occupational specialty he is qualified in.

When we get a full-time military person they only have to qualify in one and usually don't have any experience requirement to go along with that position. The technician, we feel, in most cases is more competent than the military. We feel it is a better way to go.

We also believe having two systems running at the same time causes a little difficulty for management from the aspect we have one person working in one status and another person next to him in a different status. We would like to see the technician program continue.

Senator STEVENS. Any questions?

Mr. PEIRCE. I would like to comment, Mr. Chairman, that it seems to me that the purpose for this conversion is that we are not going to have enough qualified technicians to maintain the readiness state. The report speaks to a need for additional technicians.

It appears to me that the best move to assure our readiness and our defense would not be to convert positions but to add some full-time military positions there, to see if, in fact, we can achieve filling those.

Our experience in the Army, Navy, and Air Force so far indicates the aptitude of those coming in is probably such that we will not in a short period of time be able to achieve a technician that has the expertise to maintain the sophisticated weapon systems we have today.

The civilian technician we find has years of experience, normally. As long as we keep supplementing this force we will maintain this aspect of it.

I think the other thing we have found is that we get a higher quality person in the civilian technician than we get with those who come in under the voluntary force aspect of it.

Senator STEVENS. They do have a readiness problem, in that the people are not prepared to accompany the Guard if mobilized?

Mr. PEIRCE. The civilian technician is such that he or she will accompany them.

Senator STEVENS. I know, but it is a difficult problem for the military commander to contemplate. I think we have a real problem. We will look into it. I know what you mean. Up my way there is no question about the feeling up there; they prefer the civilian technician.

We will look into it and we will try to see what we can do. We will mention it in our report this year.

Adm. Philip W. Smith, national president of the Naval Reserve Association.

NAVAL RESERVE ASSOCIATION

STATEMENT OF REAR ADM. PHILIP W. SMITH, USNR, NATIONAL PRESIDENT, NAVAL RESERVE ASSOCIATION

ACCOMPANIED BY:

REAR ADM. JAMES FOREST, USNR, EXECUTIVE DIRECTOR, NRA

CAPT. JOHN BELL, USNR, LEGISLATIVE CONSULTANT

Admiral SMITH. Mr. Chairman, I have with me Adm. James Forest, executive director, and Capt. John Bell, our legislative consultant.

I wish to express the gratitude of the Naval Reserve Association members for allowing me to testify before you today.

Had it not been for the Congress over the past decade, we very much doubt if there would be a credible Naval Reserve today. We ask that you on Capitol Hill continue your support for building a strong Naval Reserve Force.

I request that my submitted testimony be made a part of the record. I propose to summarize, briefly, that testimony.

Senator STEVENS. It will be included as though read.

Admiral SMITH. We were a bit disappointed this year when the new administration submitted its amended budget to Capitol Hill to find that very little was changed from the Carter budget in the Guard and Reserve areas, this after Presidential Candidate Reagan and Secretary Weinberger had made strong statements concerning the need to build up the Reserve Forces. We choose to believe at this time that the failure to amend the Reserve budget was an oversight during a very brief but hectic period during which the budget was almost completely reconfigured.

I noted in one of the recent trade publications that Leonard Sullivan, Jr., the former Assistant Secretary of Defense for Program Analysis and Evaluation was quoted concerning the ways in which industry or Government could fumble away badly needed defense budget increases to make up for past underfunding. He said, among other things, " * * * focus on our Active Forces and neglect our disintegrating Reserve structure and industrial mobilization capabilities."

In that atmosphere, we claim that there is no greater value than a combat-equipped, combat-ready person or unit in the Guard and the Reserve. We will propose high priority Naval Reserve projects today, ones which will cause significant improvements in the capability of the Naval Reserve to meet its wartime commitments.

Additionally, we will address the total aircraft procurement plan for the Navy.

NAVAL RESERVE STRENGTH

We were very disappointed last year when the outgoing administration defied congressional direction by refusing to allow an increase in Naval Reserve strength from 87,000 selected reservists to the 92,000 funded by the appropriations bill. Consequently, instead of building toward wartime requirements of 114,000 selected reservists, the Naval Reserve is stagnated at the 87,000 level.

The irony of the OSD action last year comes when one looks at the wartime shortages which would occur.

NAVY MANPOWER MOBILIZATION SYSTEM

The Navy manpower mobilization system, NAMMOS, has validated a wartime requirement of 114,200 selected naval reservists. Additionally, the active Navy is short some 22,000 skill ratings. This means that if we were to go to war today our Navy would be short over 49,000 qualified personnel to fill required billets.

The authorization conference will have to decide between the 87,600 strength Naval Reserve in the Senate bill and the 90,000 in the House bill. Since whatever figure is accepted represents a floor, NRA strongly recommends that this committee recommend a funded strength of 97,000 naval selected reservists to be reached by the end of fiscal year 1982. We estimate that such gradual buildup would cost an additional $15.5 million, but it would be a big step to start filling a combat void at the most reasonable cost.

It is also recommended that the committee recommend the funding of approximately 5,600 officer and enlisted personnel who are in a category D status for their annual 2-week active duty for training. These individuals drill all year long without pay which, we believe, is more than enough to expect from these dedicated individuals. Funding for these individuals would cost approximately $10 million. At the present time I think there is funding for 300, a very small number.

Senator STEVENS. I think you are right.

NAVAL RESERVE FORCE ASW FRIGATE IMPLEMENTATION PLAN

Admiral SMITH. We request that the committee support full implementation of the direction provided in the fiscal year 1981 defense appropriation bill concerning the NRF ships and the Naval Surface Reserve.

The plan provided by the Congress is a well-conceived, complete blueprint for the success of the Naval Reserve surface force. The plan is a package that should be implemented in total. Any attempt to significantly modify the package could alter the degree of success of the proposed program. NRA strongly supports the utilization of the TAR personnel as the active duty members of the NRF ships' crews.

Action should already have been taken to fill the 1,000 billets directed by the appropriations bill as the first increment of TARS to replace the regulars aboard the NRF ships. Since this expansion of the TAR program adds new ratings to the TAR community, it will take some time to fully implement this phase of the change to all Reserve manning.

We fully concur with the provision that the ships meet established class maintenance standards. They should be transferred into the NRF in good condition and they should be retained in as good condition as the fleet ships, with current fleet-type overhauls. So many of the problems with the NRF ships in the past can be traced directly to maintenance quality control mismanagement.

In our view, there is no substitute for giving the Chief of Naval Reserve control over his assets. That means operational control, administrative control and management control of the surface and air elements of his command.

NATIONAL GUARD

The National Guard is regarded as one of the most successful branches of the Reserve components because it has a great deal of autonomy and therefore, say, in the planning, programing, and budgeting of its forces. This autonomy, coupled with expertise in the Reserve community, would cause a quantum increase in the effectiveness of the Naval Reserve. The Navy's proposed implementation plan constitutes a valid initial phase of the full plan as directed by Congress. They have started.

The ships should be located in an area where the drilling population will support the number of ships in that homeport. An alternative would be to have transportation available to take the drilling population to the ships. Until substantial numbers of C-9B's are available to provide this service, homeport collocated with an adequate drilling population is a must.

Mr. Chairman, I have emphasized what needs to be done to make the 1981 appropriations bill concept of the Naval Surface Reserve Force work. I maintain that if the program is implemented with a positive attitude that it will work and produce a Naval Reserve that you and I and the Navy will be proud of.

We have the people potential to do this, and if we but give it a chance, be assured that the reservists can handle any weapon system which operates today, with reasonable transition time and training support. The combination of the TARS and selected reservists provide the expertise, the continuity and the stability to man the most complicated or sophisticated system.

Our only limitation is that we cannot deploy with that system unless put on active duty for an emergency or wartime situation, so the long peacetime deployments scheduled for ships and aircraft squadrons have to be handled by the active units. These deployments, as I see it, are the only limitations to a unit being manned by reservists.

We receive our personnel assets from people who choose not to make the Navy a career. With the training money invested in these individuals, we should try very hard to keep them in a Reserve status so their skills are not lost to us.

NAVY AIRLIFT MODERNIZATION

Admiral **Smith**. The unique airlift requirements of the Navy are best satisfied by a Navy organic airlift capability. This has been verified through congressional hearings and budget actions, through Navy studies, through OSD study—DODTAM—and through Public Law 10 U.S.C. 5012(b).

The present C–118's have been flying for 30 years and are giving up faster even than planned, which, unless something is done expeditiously, will cause a lot of highly trained reservists to go home for lack of billets. The case for the C–9B to serve the needs of the fleet commanders in wartime is well documented as being the best of the options available.

This aircraft has the best dispatch reliability rate of any operational aircraft in the military inventory—99.5 percent in Conus. It is flown by naval reservists and is manned to triple its peacetime flight hours schedule for wartime surge requirements. NRA believes that there is no more cost-effective operation in the Defense Establishment today.

There are several actions which are necessary to enable the Navy to fulfill its mission of providing organic air transport essential for naval operation. The Congress needs to commit to a multiyear buy of C–9B aircraft, commencing with six aircraft in fiscal year 1982 and then six aircraft each in fiscal years 1982 through 1985, and four more in fiscal year 1986.

More procrastination by DOD or Congress may cause the production line to be closed and the resultant loss of the most viable option with which to fill the Navy's organic airlift requirement.

As an interim stopgap measure, there are 12 used DC–9 aircraft available for sale or lease. These can be obtained almost immediately to fill the opening void in capability caused by the rapid deterioration of the C–118's and the resultant loss of the trained Reserve squadron personnel. This is an interim measure to provide a short-term solution to the predicament in which the Navy now finds itself.

The Senate Armed Services Committee authorized $50 million for 12 used DC–9's and the House Armed Services Committee $37 million. A minimum of $50 million is required to provide the DC-9's in adequate numbers. They are compatible model aircraft but in the passing configuration.

RECOMMENDATIONS

Admiral SMITH. We recommend that (a) authorization and funds be added in the amount of $133.5 million, including site support and initial spares to procure six C-9B's in fiscal year 1982; (b) language be added to insure a multiyear procurement for the entire requirements for C-9B aircraft in accordance with the schedule attached to our statement.

Senator STEVENS. Have you discussed that with the Navy Department?

Admiral SMITH. Are you talking about the used aircraft?

Senator STEVENS. Yes, acquisition of them.

Admiral SMITH. Yes, we have.

Senator STEVENS. Did they seek that from the Department? Why don't we have that request?

Admiral SMITH. This came about after the original submission; the POM had been processed and gone through the process for the last year. The availability of the DC-9's is a relatively new thing. As late as a year and a half ago the model DC-9 had been bringing premiums. As more of the Boeing 727-200's have come in and the stretched version of the DC-9, we now have an available market for DC-9's that we can buy at a reasonable rate that really was not there about 2 years ago.

We have concurrence of the Navy that they would like to do that. That has been authorized by both authorizing committees. There is a difference in amounts but they both authorized it.

And we recommend procuring 12 used DC-9 aircraft from a commercial source for approximately $50 million, plus $25 million for spare parts and site support.

P-3A/B TACTICAL NAVIGATION MODIFICATION

Admiral SMITH. The next item we have is the P-3A/B tactical/navigation modernization, TacNavMod.

The Naval Reserve P-3 maritime patrol aircraft constitutes approximately 35 percent of the total Navy commitment. These are the units which would undoubtedly be called very early in the mobilization process to counter our No. 1 threat to this country—the Soviet submarine force.

The modernization package to which I refer would upgrade the Naval Reserve P-3's to a baseline P-3C capability. Presently the aircraft is virtually incapable of countering the Soviet underseas fleet.

Last year the House Armed Services Committee responded to our request to accelerate the modernization program. We are here again this year to request that additional aircraft receive the approximately 75 percent improvement in ASW capability which the modernization program provides.

The request is predicted upon modifying the highest number of aircraft consistent with an achievable installation schedule.

NRS strongly recommends that the Congress fund the installation of the P-3A/B TacNavMod in 36 aircraft and $30 million over the budget submission.

The Senate authorization bill had two new P-C3 aircraft for the Navy. We recommend that those be funded as well for the Naval Reserve. We have 12 for the Regular Navy and they added 2 to the authorization to go to the Naval Reserve. This will bring us back on schedule if we have the 26 aircraft.

Both the authorization committees authorized the additional $30 million for the modification.

NAVY AIRCRAFT PROCUREMENT PLAN

Admiral Smith. NRA has conducted an examination of the total needs for the fiscal year 1981 and the remainder of the FYDP years. It represents the details of the need to which Navy witnesses have testified both personally and professionally. It takes into account the ability of the Navy to assimilate and effectively utilize the assets as well as the capability of industry to produce those assets.

It is predicated on the current operation of 12 airwings. If this number is increased to 13 or 15 airwings, corresponding asset increases will be required. In some cases, production quantities can be readily increased, but in others it will be more difficult for industry to respond.

The plan that NRA has developed is shown in appendix A in our submitted testimony.

The plan for fiscal year 1983-86 is the Carter plan which we believe to be completely inadequate to even offset normal aircraft attrition.

NRA is very pleased to note that the Reagan administration has moved out positively by increasing significantly the proposed fiscal year 1982 naval aircraft procurement plan, something the Congress has been trying to do on its own initiative for several years. We hope and trust that the outyear plan will also provide for the modernization of the Naval Reserve aircraft.

An area needing immediate attention is the procurement of carrier onboard delivery—COD—aircraft. The dire needs of this program must be positively satisfied, especially in light of increased emphasis on seapower projection centered around the aircraft carrier.

The prolonged periods of Indian Ocean operations extended the Navy's logistics capabilities to the limits and may have even overextended these limits. The present COD inventory can barely handle the peacetime tempo of operations.

NRA recommends that the Congress examine very carefully the Navy's COD requirements.

ARAPAHO PROJECT

Admiral Smith. There was one other item that we left out of our testimony and that is the Arapaho project.

We have some money in the authorization to continue. That is where we are proposing to put containerized units on merchant vessels which will have either the antisubmarine warfare weapon suite on it, or a similar weapon suite, so that we can put some defensive units on our merchant ships.

The original proposal was to put an ASW unit in a compartment, in a container similar to other containers, and we would have another for habitability of the crews, and we would use our reserve of ASW helicopter squadrons as the weapon system for the ASW. It would give us our instant Navy. It is a way of giving some protection to our merchant ships.

The program has been proposed, has been an off-and-on thing for the last 5 years. There was development money in, I believe it is, the Senate bill, that was added. The program has been off and on. We think it has merit. We did leave that out.

Senator STEVENS. We will take a look at that.

Admiral SMITH. Thank you, Mr. Chairman.

I will attempt to answer any questions that you might have.

Senator STEVENS. I don't have any questions. We thank you for a very complete statement. We will take a look at some of your suggestions.

[The prepared statement of Admiral Smith follows:]

Prepared Statement of Rear Adm. Philip W. Smith

U.S. NAVAL RESERVE

PRESIDENT, NAVAL RESERVE ASSOCIATION

Mr. Chairman, committee members, the Naval Reserve Association is very appreciative of the opportunity you have given us to testify before you today. Although the Naval Reserve is in better shape today than it has been for several years, there is still a lot of room for improvement. We believe that concentrating on improving the readiness, the responsiveness and the strength of the Naval Reserve Force is just about the most cost effective method of improving our capability to fight of ANY action which could be taken in the Defense area.

Today we plan on covering several issues which are of vital importance to the readiness of the Naval Reserve Force and which require action by this committee. The issues include: the funded strength of the Naval Reserve; the Navy Airlift Modernization; the Tactical Navigation Modernization Program for the Naval Reserve P-3A/B Orion Anti-Submarine Warfare Aircraft; the purchase of two new P-3C Orions for the Naval Air Reserve; the Navy implementation plan for the Naval Reserve Force ships and a proposed procurement plan for Naval Aviation.

First, we believe that dollar for dollar the nation will get more value from funds expended on the Reserve than on the active forces -- where the mission can be accomplished by Reserve Forces. Our contention is that Reserve units can match or out-perform active units with the same basic equipment. This is easy to understand when you consider the experience level of the Reservists and the Reserve units.

The Naval Reserve Association is very pleased to note that President Reagan has stated repeatedly his intention to build up the Reserve forces. A few months ago the NRA NEWS featured an article by Martin Anderson, the Assistant to President Reagan for Policy Development, which we reprinted with permission of the Washington Post. The article, "Build Up The Reserves, Not Registration", made a strong case for strengthening and planning to use the Reserve and Guard to supplement the active forces in the event of a military threat to this country. Mr. Anderson believed we should:

o Bring the active forces up to full combat capability.

- o Notify the Reservists and Guardsmen that they will be called up regardless of marital or political status if needed.
- o Arm the Reserve and Guard with modern equipment and weaponery.
- o Improve incentives for enlistment and reenlistment in the Reserve and Guard in addition to better management of our current reserve forces.

Our Association has long advocated the same points Mr. Anderson brought out. NRA has listed many times previously the three requirements for a strong Naval Reserve Force as being People, Equipment and Training.

- o People - First we need to decide how many and what kinds of people are required to man the Naval Reserve Force and do what is required to get them on board. (The Navy Manpower Mobilization System (NAMMOS) Study has validated the numbers needed).
- o Equipment - The Naval Reserve must have combat capable equipment and weapons ready to fight with immediately, compatible with the active supporting or supported units. For instance, the aircraft of the Reserve Air Wings must be supportable by the Aircraft Carrier on which they will embark; Naval Reserve Force Ships must have the same basic communications package as their active counterparts. The Equipment requirement is probably the most straight forward of the needs but also the most expensive,resulting in the most procrastination by the planners.
- o Training - Lastly, we have to train the people on the equipment which they will use in combat or in support of the combat effort. This is, relatively speaking, the easiest part of the effort provided the equipment or weaponry is available because the Reservists are already trained. Their skills need only to be sharpened or updated.

We have added another requirement because it has been lacking in the past. That requirement is support.

- o Support - The necessary support calls for a concensus of the Navy, The Office of the Secretary of Defense, Office of Management and Budget, The President and the Congress in developing a utilization plan for Reserve and Guard Forces. Never in recent history has there been general agreement among the above participants to implement a general plan, say nothing of a definitive one, for manning, equipping and training a Naval Reserve Force. Secretary of Defense Laird's Total Force Memorandum in August 1970 was a

GOOD START TOWARD ACHIEVING A NATIONAL POLICY CONCERNING THE UTILIZATION OF THE GUARD AND RESERVE, BUT NO CONCERTED PLAN OF ACTION HAS EMERGED WHICH COULD BE IMPLEMENTED. WORDS WHICH LAVISHLY AND PROFUSELY POUR FORTH IN SUPPORT OF THE RESERVE AND GUARD DO NOT COST MONEY, WHILE PEOPLE, EQUIPMENT AND TRAINING DO. WE WERE DISAPPOINTED THAT THE AMENDED 1982 BUDGET CONTAINED NO INCREASE TO THE CARTER BUDGET FOR THE NAVAL RESERVE, WITH THE EXCEPTION OF THE ADDITION OF THE SIX RESERVE HELICOPTER SQUADRONS.

NAVAL RESERVE STRENGTH

IT WAS HOPED THAT WITH THE OBVIOUS SUPPORT FROM PRESIDENT REAGAN, FROM SECRETARY WEINBERGER'S REPEATED STATEMENTS ABOUT THE NEED TO STRENGTHEN THE RESERVE COMPONENTS, AND WITH THE NEW SECRETARY OF THE NAVY CITING THE NEED FOR A STRONG NAVAL RESERVE, THERE COULD NOW BE A COORDINATED EFFORT BETWEEN THE ADMINISTRATION AND THE CONGRESS TO BUILD THE NAVAL RESERVE UP TO THE REQUIREMENTS VALIDATED BY THE NAVY MANPOWER MOBILIZATION SYSTEM (NAMMOS).

LAST YEAR NRA RECOMMENDED THAT THE CONGRESS FUND A NAVAL RESERVE FORCE OF 92,000 SELECTED NAVAL RESERVISTS AS A FIRST STEP IN A GRADUAL BUILDUP TO THE FIGURE VALIDATED BY NAMMOS WHICH AT THAT TIME WAS APPROXIMATELY 106,000 CATEGORY A SELECTED RESERVISTS. THE FY 1981 DEFENSE APPROPRIATIONS BILL PROVIDED THE FUNDING FOR A NAVAL SELECTED RESERVE AVERAGE STRENGTH OF 92,000. IN DECEMBER OF 1980 THE OUTGOING DEPUTY SECRETARY OF DEFENSE APPROVED AN OSD POLICY TO HOLD THE NAVAL RESERVE STRENGTH FOR FY 81 AT APPROXIMATELY 87,000 SINCE THIS WAS THE NUMBER AUTHORIZED BY THE CONGRESS AND WAS THE NUMBER IN PRESIDENT CARTER'S PROPOSED BUDGET FOR FY 1982. THE $12.4 MILLION FUNDED BY CONGRESS FOR THE INCREASE TO A STRENGTH OF 92,000 WAS DIRECTED FOR OTHER PURPOSES BY OSD.

THIS ACTION BY OSD TO DIVERT NAVAL RESERVE FUNDING WAS TAKEN IN SPITE OF THE FACT THAT THE NAMMOS SUPPORTS A SELECTED NAVAL RESERVE OF OVER 114,000 OFFICERS AND ENLISTED RESERVISTS. OVERLOOKED ALSO WAS THE FACT THAT THE AUTHORIZATION FIGURE OF 87,000 WAS A STRENGTH FLOOR AND NOT A CEILING OR END STRENGTH FIGURE.

MANPOWER AND SEAPOWER ARE SYNONOMOUS, AND RIGHT NOW THE NAVY IS SHORT SOME 22,000 SKILL RATINGS. THE NAVY MANPOWER MOBILIZATION SYSTEM (NAMMOS) HAS VALIDATED THE REQUIREMENT FOR 114,200 SELECTED NAVAL RESERVISTS. THE CONGRESS APPROPRIATED MONEY FOR 92,000 NAVAL RESERVISTS FOR 1981, AND THE DEFENSE DEPARTMENT PROMPTLY DEFIED THE CONGRESS BY ESTABLISHING THE NAVAL RESERVE STRENGTH CEILING AT 87,000 AND USING THE ADDITIONAL MONEY FOR OTHER PURPOSES. THIS ALL MEANS THAT THERE IS A TOTAL IMMEDIATE SHORTAGE OF OVER 49,000 TRAINED PERSONNEL

TO MAN REQUIRED WARTIME BILLETS. NRA HAS RECOMMENDED THAT: THE 1981 AUTHORIZED FUNDS THAT WERE DIVERTED FROM THE NAVAL RESERVE BE ORDERED BACK INTO THE RPN ACCOUNT AND THE NAVAL RESERVE BE ALLOWED TO RECRUIT TO THE 92,000 LEVEL IN FY 81; THE NR STRENGTH LEVEL BE INCREASED TO 97,000 FOR FY 82 AND THAT BILLETS BE GIVEN THE NAVAL RESERVE OVER AND ABOVE THE NAMMO'S REQUIREMENTS THAT WILL HELP FILL THE SKILL SHORTFALLS IN THE FLEET. THE PROPOSAL TO LIMIT THE NAVAL RESERVE STRENGTH GROWTH RATE TO MATCH THE GROWTH OF THE ACTIVE FLEET APPEARS TO DISREGARD THE CURRENT SHORTFALL IN MOBILIZATION MANPOWER AS WELL AS THE 21,000 NAVY SKILL SHORTAGES.

IN THE LEGISLATIVE ACTION TAKEN SO FAR THIS YEAR, THE SENATE AUTHORIZATION BILL APPROVED A NAVAL RESERVE STRENGTH OF 87,600 WHILE THE HOUSE ARMED SERVICES COMMITTEE HAS RECOMMENDED A STRENGTH OF 90,000. SINCE THERE IS AN OBVIOUS NEED FOR ADDITIONAL NAVAL RESERVISTS TO HELP FILL THE WARTIME REQUIREMENT FOR PRE TRAINED PERSONNEL, THE NAVAL RESERVE ASSOCIATION REQUESTS THAT THE APPROPRIATIONS COMMITTEE RECOMMEND A FUNDED NAVAL RESERVE STRENGTH OF 97,000 TO BE REACHED BY THE END OF FISCAL YEAR 1982. FUNDING COULD BE FENCED FOR THE PURPOSE OF INCREASING THE STRENGTH AND PRO RATED OVER THE YEAR FOR A GRADUAL BUILDUP. NRA ESTIMATES THAT SUCH A PROGRAM COULD BE ACCOMPLISHED FOR APPROXIMATELY $15.5 MILLION. IT IS ALSO RECOMMENDED THAT CATEGORY D NAVAL RESERVISTS WHO DRILL IN REQUIRED BILLETS WITHOUT PAY BE FUNDED FOR THEIR TWO WEEKS ANNUAL ACTIVE DUTY FOR TRAINING AT THEIR MOBILIZATION SITES WITH PAY. THE CATEGORY D FUNDING WOULD PROVIDE A RESERVIST, AT LEAST PARTIALLY TRAINED AT HIS MOBILIZATION BILLET AT THE LOWEST POSSIBLE COST. IT IS FURTHER RECOMMENDED THAT THIS BE APPROVED FOR APPROXIMATELY 5,000 OFFICERS AND 600 ENLISTED AT AN ADDITIONAL COST OF APPROXIMATELY $10 MILLION.

NAVAL BUILDUP

INCLUDED IN THE AUGMENTED FY 1982 BUDGET REQUEST IS A PROPOSAL TO BRING BACK TWO OF THE IOWA CLASS BATTLESHIPS AND THE CARRIER ORISKANY TO ACTIVE SERVICE. THIS PROPOSAL, IF APPROVED, IS GOING TO REQUIRE THE ADDITION OF A SIGNIFICANT NUMBER OF PERSONNEL TO THE NAVY, PROBABLY BOTH ACTIVE DUTY AND RESERVE TYPES. MANNING FOR THE THREE SHIPS MENTIONED ABOVE CAN BE PROVIDED BY ACTIVE DUTY ACCESSIONS, AN INCREASED NAVAL RESERVE COMMITMENT, BY LAYING UP SOME OF THE PRESENT SHIPS, OR A COMBINATION OF TWO OR ALL OF THE ALTERNATIVES. IN ANY CASE, THE MOST ECONOMICAL APPROACH TO THE MANNING REQUIREMENT WOULD BE TO RELY UPON THE NAVAL RESERVE TO THE MAXIMUM EXTENT POSSIBLE. FOR INSTANCE, THE ASSIGNED AIRCRAFT TO SUPPORT THE REACTIVATION OF ORISKANY WILL HAVE TO COME FROM SOME SOURCE OTHER THAN THE ACTIVE

Navy. Some older aircraft can be brought out of mothballs and new squadrons formed around them, a Marine Air Wing could be assigned, or; one of the Reserve Air wings could be scheduled on a contingency basis. It should be remembered that Coral Sea was designated by OSD as a Reserve Carrier but it has never been utilized as such. The most economical way to maintain any ship for immediate wartime service action is to assign it to the Reserve Force. The plans to build to a 600 ship Navy will undoubtedly require a tremendous effort to recruit and train the personnel to man the ships and their support. A significant increase in Naval Reserve strength would also seem to follow for ship and support augmentation. There is also possibility that one of the Battleships could be designated as a Naval Rese. Force (NRF) ship to be manned by a Reserve crew.

The Naval Reserve Force ASW Frigate Implementation Plan and The Funding of Active Duty Naval Reserve Personnel (TARS)

Last year the Defense Appropriations Bill directed the Navy to take certain actions concerning the Naval Reserve Force (NRF) ships including the submission of a detailed implementation plan to the Congress by 1 April 1981. The Navy's implementation plan dated 29 April 1981, will be commented on in some detail.

FY 1981 Defense Appropriations Bill

A review of the FY 81 bill reveals the following direction to the Navy concerning the Naval Reserve Force (NRF):

- The wartime convoy escort mission is assigned to the Naval Reserve.
- The manning of the NRF is to be 50% Selected Reservists and 50% active duty TARS (Training and Administration of Reserves).
- The ships shall meet established class maintenance standards. Homeporting will be based upon drilling Reservists population.
- Operational control of the ships will be under the Chief of Naval Reserve and the peacetime mission will be crew training.
- No fewer than eight FRAM destroyers will remain in the NRF pending transfer of new FF 1052s, FFG-1s or FFG-7s from the active force.
- Navy will transfer the newer ships into the NRF to a force level of 24 ships, four ships by end of FY 82 and 12 ships 1982-87.

- Chief of Naval Reserve shall control funding over all Naval Reserve activities. Funding for TAR personnel shall be under RPN appropriations.

The Naval Reserve Association supports the provisions of the Congressional directions referred to above. Most of the directed actions were stated as recommendations in our Congressional testimony last year before all four of the Armed Services and Appropriations Committees. We also believe that the House Appropriations Report on the FY 81 Defense Appropriations Bill contained a wealth of good solid background information concerning the NRF ship management and operations, more than has ever been included in one document. It was a very frank and factual dissertation on the NRF ships, one which is recommended to anyone interested in Seapower and how to man and manage a very important segment of our Navy.

Reportedly, the details of the Appropriations Bill were agreed to by the Navy before the Bill was written. Such detailed program direction by Congress often brings complaints about micro-management. Sometimes, however, micro-management by the Congress is necessary to overcome the reluctance of a service to comply with Congressional direction.

NRA believes it is important that the Navy comply with the Implementation plan prepared by the joint conference on the FY 1981 Defense Appropriations. The program directed by the joint conference was a fully integrated one, with the different portions of the program interconnected and interdependent on each other for success. NRA believes the Appropriations Bill amplified by the House Appropriations Committee report, provided the Navy with a blueprint by which it could build an expanded strong Naval Reserve Force in the most efficient and effective manner. The Appropriations Conference report on Defense is potentially the most far reaching and important statement of policy regarding the Naval Reserve to emanate from the Congress since the Reserve Bill of Rights.

Operational and Management Control

The Congress stated "NRF escorts will operate under the direction of the Chief of Naval Reserve. The peacetime employment of the NRF surface combatants will be devoted to the training of their crews in the wartime mission of anti-submarine warfare (ASW) convoy escorts. The operational control of the Reserve destroyers will be shifted to the Chief of Naval Reserve."

The Navy appears to be reluctant to assign operational and management control of the NRF ships to the Chief of Naval Reserve but NRA can see no realistic alternative to phasing in such assignment if the prescribed manning mix of 50% Selected Reserve and 50% active duty TARS is complied with. The peacetime mission of the NRF ships is to train the crews for the wartime mission of convoy escort. When the ships' crews are trained and manned for advanced exercises with fleet units, then operational control could be shifted to the Fleet Commander or his subordinate for the time required to complete the exercise. The two-week annual active duty period could be spent entirely under a fleet command. There has been a tendency by the fleet commanders to use the ships to the maximum extent possible for fleet peacetime commitments to the detriment of the assigned reservists' training. This has been common practice in the recent past and has led to the maintenance deterioration of the ships, poor morale among the active duty crews and a lack of motivation for reservists to be aboard under those conditions. The Naval Air Reserve has operated under the operational control of the Chief of Naval Reserve very effectively since 1970. The recent successful deployment of Reserve VAW Early Warning units to Keflavik, Iceland for a four week period to fill an active force commitment cogently demonstrated the effectiveness of the concept. The units operated under an overseas Navy command in conjunction with the Air Force Defense Command.

In its implementation plan the Navy has chosen to grant CNAVRES direct liaison with the surface type Commanders (TYCOMs) for coordination of the scheduling of the ships and has given CNAVRES the responsibility for operational scheduling of the NRF Frigates. CNAVRES is given the responsibility for manning the ships and the support units. Everything else is given to the TYCOM with CNAVRES monitoring the TYCOM's actions. The fact of the matter is that a two star flag may not be very successful in monitoring the actions of a three star flag officer.

The situation as it exists in the very successful part of the CNAVRES command structure, the Naval Air Reserve, provides the Naval Reserve Chief with complete control over his Naval Air Forces. He is responsible to the TYCOMs, COMNAVAIRLANT and COMNAVAIRPAC, for the readiness of the air units and shifts operational control to the TYCOMs when they are ready and needed.

The Congressional plan provides guidance based upon a successful program. It would require a minimal number of additional personnel to manage the surface reserve force but the management would be much more conversant and knowledgeable of reserve considerations than would be the case under the Navy's proposal. In other words, the Congressional direction provides for efficient, effective management and can be phased in expeditiously by the Navy. However, the Navy's 29 April 1981 implementation plan appears to constitute a substantial move by the Navy toward full implementation of the Congressional Naval Reserve Force Plan.

RPN Funding for TARS

Congress directed that "...authority over and control of funds appropriated for Naval Reserve activities will rest with the Chief of Naval Reserve. Funding requests for all TAR personnel shall be included in the Reserve Personnel, Navy appropriation in lieu of the Military Personnel Navy appropriation".

The Bill called for control of funds appropriated for Naval Reserve activities by the Chief of Naval Reserve and placed all TAR Personnel under the Reserve Personnel Navy appropriations. Such a control provision would parallel the procedures used in most of the other Reserve Components who have their own comptroller shops, manage their own assets and pay their active duty reservists and technicians out of Reserve appropriations. Such funding control would allow the Chief of Naval Reserve much more flexibility and influence in planning, programming and budgeting for his forces. It would also stabilize the TAR community by taking them out from under the Military Personnel Navy account where they come under fire as each new watch is established in the Navy.

The Navy makes the argument that the simplified system used to pay about 200 active duty reservists out of Reserve Personnel Navy (RPN) funds could not be used if the Congressional proposal to fund all TARs out of RPN funds instead of the Military Personnel, Navy (MPN) appropriation was followed. Navy further states that under the Congressional plan it would be undesirable to keep two sets of accounts when the active duty crew consists of both TAR and USN personnel and that it is inconsistent with the Total Force concept.

If the Congressional direction is followed, ALL personnel aboard the NRF ships will be Reservists (Active and Sel Res) and ALL personnel would be paid from RPN funds. This then would be a simplier system than the one Navy proposes whereby USN and TARs would be funded by MPN and the Selected Reservists by RPN. Under the Congressional proposal the ship would be a Reserve ship and funded by Reserve monies. Under the Congressional plan, funding control, management, accountability and audit trails should be simplified and less costly overall. NRA believes the Congressional direction should be implemented.

REPLACEMENT SHIPS

THE CONGRESSIONAL DIRECTION CALLED FOR A NRF FORCE LEVEL OF NOT LESS THAN 24 SHIPS WITH TWELVE OF THE FF-1052S, FFG-1S OR FFG-7S TO BE TRANSFERRED IN FISCAL YEARS 1982-1987. THE NAVY HAS PLANNED FOR THE TRANSFER OF 12 SHIPS BUT HAS QUALMS ABOUT THE ABILITY OF THE RESERVISTS TO COPE WITH THE SOPHISTICATED SHIPS OF THE FFG-1 AND FFG-7 CLASSES. THIS ATTITUDE WAS HIGHLIGHTED BY A RESERVE FORCE POLICY BOARD STUDY OF "THE RESERVES IN THE 1990'S" RELEASED IN DECEMBER 1980. AFTER STATING THAT THE GUARD/RESERVE (G/R) HAD DEMONSTRATED THAT THEY CAN OPERATE AND MAINTAIN ANY OF THE SOPHISTICATED, HIGH TECHNOLOGY EQUIPMENT IN A VERY COST EFFECTIVE MANNER. THE STUDY THEN NOTED: "...NEVERTHELESS, CONCERN HAS ONCE AGAIN RECENTLY BEEN EXPRESSED...THAT THE G/R MAY BE INCAPABLE OF ADEQUATELY MAINTAINING AND OPERATING THE NEWER GENERATIONS OF SOPHISTICATED, MODULARIZED AND COMPUTERIZED WEAPONS SYSTEMS. THOSE CONCERNS ARE DIAMETRICALLY OPPOSED BY HISTORICAL FACT AND PRESENT TRENDS..." THE NAVAL AVIATION COMMUNITY WAS RELUCTANT TO GIVE THE MULTI-ENGINE AIRCRAFT TO THE RESERVES, ALSO THE JET AIRCRAFT BUT THEY TRIED IT AND IT WORKED. IN FACT IT WORKED SO WELL THAT THE RESERVE UNITS ARE NOT NOW INVITED TO COMPETE AGAINST THE ACTIVE UNITS WHEN THERE IS THE SAME BASIC WEAPONS SYSTEMS INVOLVED. THE REASON IS SIMPLE, THERE IS TOO MUCH EXPERIENCE IN A RESERVE UNIT TO BE OVERCOME BY THE MIXTURE OF EXPERIENCED PILOTS AND NUGGETS IN AN ACTIVE DUTY SQUADRON.

WE SHOULD REMEMBER WHAT ADMIRAL ISAAC KIDD, RECENTLY RETIRED COMMANDER IN CHIEF ATLANTIC, SAID ABOUT HAVING COMMAND OF A RESERVE SHIP ..."MY EXEC AND I WERE THE ONLY REGULARS ON THE DESTROYER ELLYSON WHICH I COMMANDED DURING THE KOREAN WAR AND WHICH WAS ONE OF MY GREATEST DELIGHTS IN 40 YEARS IN UNIFORM... BEFORE I LEFT THAT SHIP WE HAD THREE DEPARTMENT BATTLE EFFICIENCY PENNANTS AND THE SHIP "E" AMONG ALL THE SHIPS OF HER TYPE IN THE ATLANTIC...IT WAS AN EXCELLENT WONDERFUL THING JUST TO BEAT THE PANTS OFF THOSE BIG, NEWER, FULLY MANNED WITH REGULARS, DESTROYERS..."

IF THE PLAN GIVEN THE NAVY IN THE APPROPRIATION BILL IS FOLLOWED, THE RESULTS WILL BE WELL WORTH THE EFFORT IN DOLLARS SAVED AND READINESS GAINED. THE PLAN SHOULD BE IMPLEMENTED IN FULL TO MAKE IT WORK.

FUNDING MANAGEMENT AND OPERATIONAL CONTROL OF THE NAVAL RESERVE FORCE ASSETS PLACES THE RESPONSIBILITY AND AUTHORITY WHERE IT WOULD BE MOST EFFECTIVE, SUCH AS IS THE CASE OF MOST OF THE OTHER RESERVE COMPONENTS. THE NAVAL RESERVE HAS ACHIEVED SOME LEVEL OF SUCCESS IN SPITE OF THE CONFLICT AND TURMOIL TO WHICH IT HAS BEEN SUBJECTED, PARTICULARLY OVER THE PAST DECADE. USING TARS AS THE ACTIVE

DUTY COMPONENT OF THE SHIPS (AS IS DONE IN THE NAVAL AIR RESERVE) PROVIDES EXCEPTIONAL ACROSS-THE-BOARD EXPERTISE AND CONTINUITY NOT FOUND IN ACTIVE FORCE UNITS. LONGER TOURS ABOARD AND CLOSED LOOP DETAILING ENHANCES READINESS AND ARE COST EFFECTIVE.

SHIP MAINTENANCE

INCLUDED IN THE CONGRESSIONAL DIRECTION ON THIS SUBJECT WAS THE STATEMENT THAT "...ACCORDINGLY THE HOMEPORTING OF NRF SHIPS WILL BE BASED, AS MUCH AS POSSIBLE ON THE DRILLING POPULATION AND THE FEASIBILITY OF COLLOCATING CAPABLE SIMA UNITS. PLANS AND PROGRAMS WHICH THE NAVY IS DEVELOPING WILL EMPLOY OTHER NAVAL ACTIVITIES OR CONTRACTORS FOR MAINTENANCE BEYOND THE CAPABILITY OF THE SHIPS CREW AND THE SIMA's".

PROBABLY THE MOST IMPORTANT CONSIDERATION WHEN PLANNING FOR NAVAL RESERVE ACTIVITIES IS THE LOCATION OF DRILLING POPULATION. UNLIKE THE REGULAR FORCE, YOU CANNOT MOVE ALL THE PEOPLE INTO THE AREA WHERE THE SHIPS ARE LOCATED. THE ALTERNATIVE THEN IS TO TRY TO TRANSPORT THE RESERVISTS FROM THEIR HOMES TO THE SHIPS IF THE DISTANCE IS A FACTOR OR MOVE THE SHIPS TO THE POPULATION CENTERS. FUNDING CONSTRAINTS AND OTHER CONSIDERATIONS OVER THE PAST DECADE HAVE INCREASINGLY CENTERED THE RESERVE HARDWARE UNITS AT USN BASES. NRA HAS FOUGHT FOR YEARS TO GET A RELIABLE TACTICAL AIRLIFT CAPABILITY INTO THE NAVAL RESERVE TO HELP PARTIALLY TO ALLEVIATE THE TRANSPORTATION PROBLEM. THE EFFORT HAS MET WITH VERY LIMITED SUCCESS UP TO THIS YEAR WHICH MEANS THAT TRANSPORTING LARGE NUMBERS OF RESERVE PERSONNEL OVER CONSIDERABLE DISTANCES TO DRILL LOCATIONS IS NOT FEASIBLE.

THE NAVY PLANS TO PLACE THE FIRST SIX FF-1052 CLASS SHIPS IN NEWPORT, RI AND LONG BEACH, CA, THREE IN EACH LOCATION. WITHOUT A MAJOR MIGRATION OF POPULATION TO NEWPORT, IT WILL BE DIFFICULT TO MAN THE THREE RESERVE SHIPS SLATED TO BE HOMEPORTED AT NEWPORT. BASING THE SHIPS AT NEWPORT GIVES THE PLAN LITTLE CHANCE TO WORK AT THAT LOCATION. WHY NOT PUT A NEST OF SHIPS IN THE NEW YORK AREA WHERE THEY CAN BE MORE EASILY MANNED AND EFFECT SHIP SUPPORT PLANS AS VISUALIZED BY THE CONGRESSIONAL PLAN? THE RECENT ORDER TO MOVE THE HOMEPORTS OF THE RESERVE MINESWEEPERS FROM THEIR WARTIME MOBILIZATION SITES DEMONSTRATES A DIMINISHED CONSIDERATION OF RESERVE MANPOWER DEMOGRAPHICS AMONG NAVY PLANNERS. NRA RECOMMENDS THAT THE CONGRESS MONITOR THE HOMEPORTING PLANS FOR THE RESERVE SHIPS.

NR SHIP MANNING MIX

CONGRESS ENDORSED "...A CREW MIX OF 50 PERCENT ACTIVE AND 50 PERCENT SELECTED RESERVE WITH A PHASE-IN OF TAR PERSONNEL TO REPLACE THE ACTIVE DUTY CREWS..." FOR the Naval Reserve Force Concept.

The Navy plan follows the plan to have 50% active and 50% Sel Res personnel to man the ships. Where the Navy deviates from the guidance is in the number of TARs to be included in the active crew. Navy proposes that the TAR surface program be expanded to include all shipboard ratings "...for which an acceptable career pattern can be developed..." Only 50% of the active duty crew, however, are slated to be TAR personnel.

NRA feels that there should be little problem with finding an acceptable career pattern for TAR surface ratings. The Navy had a surface TAR program some years ago which included most of the ratings which would be required to man the active duty portion of the present and future surface Naval Reserve Force. That surface program was disestablished to accomodate the regular Navy's Deprived Rating shore duty requirements. Significant numbers of USN Personnel are performing shore duty at Naval Reserve Centers as Administrators and Instructors for drilling Reservists. These billets could be available for surface TAR shore duty tours. Consequently, there appears to be no obvious reason why: (1) There cannot be a full career pattern available for surface TAR ratings and, (2) that the Congressional direction that the 50% active duty portion of the Reserve ship crew should not be followed. The Naval Reserve Association strongly urges the Congressional direction be followed in the regard.

Navy Airlift Modernization

The modernization of the Navy's airlift capability seems to be the longest and most persistent problem being addressed by the NRA today.

Ever since the late 1960s there has been a running battle being waged between Navy and OSD as to what Navy's requirements are in intra-theater airlift. The problem seemed to be solved when the purchase of C-9B aircraft was approved by the Congress in FY 73. Altogether 14 C-9Bs were purchased for Navy and Marine Corps use. OSD then decided to consolidate all airlift under the Military Airlift Command (MAC). The consolidation decision by OSD accomodated Navy airlift requirements using "free" excess flying hours in the MAC inventory without having to purchase additional aircraft. In other words the support was supposed to be free. Obviously the free ride never happened, but OSD never backed off its original stand despite the fact that all the assumptions upon which the decision was based were invalid.

The Air Force responded to the decision to consolidate by stating that additional assets (aircraft and flight hours) were necessary to absorb the additional Navy requirements. A test of the MAC capability to assume the Naval Reserve weekend airlift requirements, in July-August of 1977, was a resounding failure. The service was poor and the cost twice that of better service with C-9Bs.

The Congress in its hearings on the matter has rejected the consolidation effort for the last six years and, in spite of OSD protests, has voted to add C-9Bs to the budget in each of the past three years, albeit in small numbers, because of the OSD opposition.

As part of the OSD plan to consolidate the airlift effort, an attempt was made for four years to get rid of the C-118s which the Naval Reserve was using to handle its own and some of the fleet requirements. Each year the Congress restored the old reliable C-118s to the force until last year when OSD finally adopted a five-year phaseout plan for that aircraft. NRA warned at that time that there should be no further extension of the C-118s because they were fast reaching the point of diminishing returns. That point was reached even sooner then anticipated when wing spar cracks were discovered in certain C-118s which meant these C-118s had to be put out of service during the past year. Already one Naval Reserve airlift squadron in New Orleans has been disestablished because of the lack of aircraft to fly. Soon, more squadrons will be lost to the force due to the same reason. Once lost, the tremendous talent and experience available in a squadron is difficult to recover. The rebuilding of a squadron is a relatively slow process. NRA has a plan to preclude the disastrous loss of talent at a time when the country cannot afford such an attrition of dedicated, highly qualified personnel. A recommendation covering this subject is discussed later in this section.

The question is frequently asked, "Why does the Navy need its own airline?" First of all, Title 10 USC 5012(b) directs that there be Navy organic, "air transport essential for naval operation." The chart shown in appendix A sets forth the overall C-9B requirements for the Fleet, the Marines and the Naval Reserve. The chart entitled "C-9B Requirements" has been updated for this year. The C-9B aircraft was originally selected from among a sizeable number of aircraft as the best aircraft available to accomplish the mission of support to the Fleet Commanders. Whatever the theory as to the blessings of consolidation are, they fall short in real life. There is nothing that is so responsive to the Navy

UNIQUE AIRLIFT REQUIREMENTS OF SHORT LEAD TIME, LOW VOLUME, HIGH FREQUENCY OF DEMANDS TO A MULTIPLICITY OF MOSTLY UNPREDICTABLE FLEET LOCATIONS THAN AN ORGANIC AIRLIFT. THE AIR FORCE AGREED WITH THE ABOVE ASSERTION DURING THE DEFENSE TACTICAL AIRLIFT MODERNIZATION (DODTAM) STUDY ALSO CONDUCTED BY OSD IN 1978. THAT STUDY ALSO CONFIRMED THE NEED FOR 37 ADDITIONAL C-9BS IN ORDER TO SATISFY THE NAVY'S REQUIREMENTS.

ONCE THE REQUIREMENT WAS VALIDATED, THE NEXT STEP WAS TO FIND THE MOST EFFICIENT AND COST-EFFECTIVE MANNER OF PROVIDING THE SERVICE. NRA BELIEVES THE AIRLIFT SYSTEM NOW IN PLACE IN THE NAVY PROVIDES THE BEST OF ALL POSSIBLE WORLDS IN THAT REGARD AND CAN BE EXPANDED, WITH MOST OF THE PEOPLE ASSETS ALREADY IN PLACE, IF WE GET ON WITH THE EFFORT NOW. NAVAL RESERVISTS FLY ALL THE NAVAL LOGISTICS AIRLIFT SUPPORT IN THE CONTINENTAL UNITED STATES (CONUS). THIS SUPPORT COULD BE FURTHER EXPANDED TO INCLUDE A COMMITMENT TO MAINTAIN AN AIRCRAFT OR POSSIBLY TWO C-9BS FOR SUPPORT OF THE SIXTH FLEET IN THE MEDITERRANEAN. THE NAVAL RESERVE COULD HANDLE THIS DEPLOYMENT BY SCHEDULING RESERVISTS ON A HEEL AND TOE OR BACK TO BACK TWO WEEK DEPLOYMENTS AS IS NOW BEING DONE IN THE VP COMMUNITY AT SEVERAL LOCATIONS. EACH SQUADRON IS LARGE ENOUGH SO THAT THE SELECTED AIR RESERVISTS CAN FLY ALL THE SCHEDULED MISSIONS IN PEACETIME AND ARE IMMEDIATELY AVAILABLE FOR A SURGE TO TRIPLE THE PEACETIME FLIGHT SCHEDULE IN WARTIME OR OTHER NATIONAL EMERGENCY. THE CREWS, WHICH ARE ALL INACTIVE RESERVISTS EXCEPT FOR A FEW TARS (TRAINING AND ADMINISTRATION OF RESERVE) ARE BASICALLY PAID FOR ONLY THE TIME THEY ARE FLYING. THESE AIRCRAFT WHICH SATISFY THE WARTIME REQUIREMENT TO SUPPORT THE FLEET COMMANDERS CAN BE EFFECTIVELY USED IN PEACETIME TO SUPPORT FLEET AND RESERVE NEEDS NOT AMENABLE TO MAC CAPABILITIES. THIS ACCOUNTS FOR ONLY 20% OF THE NAVY'S AIRLIFT REQUIREMENTS, THE REST IS HANDLED BY MAC AND CIVILIAN COMMERCIAL ASSETS. THE PEACETIME USE BY THE NAVAL RESERVE IS ESSENTIAL TO THE READINESS AND PERSONNEL STABILITY OF THE NAVAL RESERVE. DUE TO THE OSD DIRECTED CONSOLIDATION OF MOST OF THE RESERVE AIR ACTIVITIES AT USN LOCATIONS, (OUT OF THE HIGH POPULATION AREAS), AND THE NEED TO PROVIDE HANDS ON TRAINING TO SURFACE RESERVISTS, THE NEED FOR A RESPONSIVE AIRLIFT IS OBVIOUS IF WE ARE TO EXPAND OR EVEN RETAIN THE PRESENT NAVAL RESERVE FORCE.

THE EFFORTS OF THE NAVAL RESERVE ASSOCIATION TO PROCURE NEW C-9B AIRCRAFT OVER THE YEARS HAS MET WITH LIMITED SUCCESS. CONSEQUENTLY, THIS YEAR IT WAS DETERMINED THAT THERE WERE USED DC-9S EXCESS TO AIRLINE REQUIREMENTS WHICH WERE AVAILABLE FOR PURCHASE AT CONSIDERABLE LESS THAN THOSE FRESH OFF THE PRODUCTION LINE. THESE AIRCRAFT WOULD PROVIDE A SHORT TERM FIX TO THE NEED FOR A REPLACEMENT FOR THE OLD C-118 AIRCRAFT WHICH NOW FURNISH AIRLIFT FOR RESERVISTS GOING TO AND FROM DRILLS. PERFORMING WEEKEND AWAY TRAINING (WET) AND ANNUAL ACTIVE DUTY for training (2 weeks). Additionally, the purchase of the used DC-9s would help prevent the loss of trained aircrews and support personnel presently assigned to the C-118 units being phased out.

The Naval Reserve Association strongly recommends that the Appropriations Committee support the FY Defense Authorization Bill for the purchase of used DC-9 aircraft for the Naval Reserve.

Included in the Appendix are two charts. One shows the Navy requirements for Tactical Airlift Modernization and the other is a fact sheet on Navy Airlift Modernization.

P-3A/B Tactical Navigation Modernization (TAC/NAVMOD)

Last year the Congress responded to NRA's request to step up the funding of the Tactical Navigation Modernization program for the Reserve P-3A/B aircraft in order for the Reserve aircraft to gain a quantum jump in capability. This year we are again asking for help in keeping the accelerated program on track. First though, a little review of the history involved is in order.

Over the years the Navy has received long and productive service out of its land-based Maritime Patrol Aircraft (MPA). The P-2 Neptune, for instance, was introduced into service back in 1945 and only recently was it phased out of the Naval Reserve. Its successor, the P-3A, went into service in 1962 and later models of that aircraft will last into the mid 1990s.

This remarkable record has occurred because the Navy has continually added new equipment to maintain pace with the advancing technology. The technology changes have taken place in both the U.S. and the Soviet Navies.

Since the Naval Reserve represents 35% of the Navy's MPA assets, it is very important that the Reserve aircraft are kept current in state of the art improvements.

In 1977 a program was initiated to improve the overall capability of the P-3A/B aircraft. The program added tactical navigation computers, tactical displays, Omega navigation and the vernier AQA-7. The modification program provides the P-3A/B with a baseline P-3C capability. The localization performance and the ability of the modified aircraft to meet attack criteria and effectively deliver weapons are significantly improved. One reliable estimate established the improvement in capability at 75%. Obviously, the modernization package is well worth the money expended in terms of capability. The reverse is also true. It would

BE GROSS NEGLIGENCE ON OUR PART TO ACCEPT THE LESSER CAPABILITY OF THE NON-MODERNIZED AIRCRAFT UNLESS WE WANTED TO GAMBLE THAT THE AIRCRAFT WOULD NOT BE NEEDED TO COMBAT THE MOST FORMIDABLE SUBMARINE FORCE IN THE HISTORY OF THE WORLD.

A MAJOR CONSIDERATION FOR EXPEDITING THE P3A/B MODERNIZATION WAS THE SHUTDOWN OF THE LORAN ALPHA NAVIGATION STATIONS. NON-MODERNIZED AIRCRAFT LOST THEIR CAPABILITY TO OPERATE IN AN OPEN OCEAN ASW ENVIRONMENT. THE LORAN CHARLIE REPLACEMENT IS NOT SATISFACTORY WORLD-WIDE AND IS AT BEST A BACK UP SYSTEM FOR ASW MISSIONS. LORAN IS ALSO AN EXTERNAL SOURCE SYSTEM AND IS SUBJECT TO SHUTDOWN BY OUTSIDE INTERESTS IN A WARTIME SITUATION.

IN VIEW OF THE ABOVE, NRA BELIEVES IT TO BE EXTREMELY IMPORTANT TO MODERNIZE THE APPLICABLE AIRCRAFT AS SOON AS POSSIBLE AND AT A RATE CONSISTENT WITH THE MAXIMUM CAPABILITY TO INSTALL THE SYSTEM.

THE NAVAL RESERVE FORCE IS ASSIGNED 130 P-3A/B AIRCRAFT WHICH INCLUDES THE PIPELINE. THE NAVY PLAN FOR INDUCTION INCLUDED ONLY 105 AIRCRAFT FOR MODERNIZATION. SCHEDULED FOR FY 82 WERE 28 PLANES, HOWEVER, THE BUDGET SUBMISSION ONLY INCLUDES 15 AIRCRAFT TO BE MODERNIZED AT A COST OF $20.1 MILLION. AT THAT RATE THE PROGRAM WILL FALL BEHIND THAT OF THE ORIGINAL UNSATISFACTORY SCHEDULE. THE NAVY INTENTION IS TO STOP MODIFICATIONS IN FY 1986 WHICH WOULD LEAVE A SIGNIFICANT NUMBER OF RESERVE P-3A/BS UNMODIFIED THROUGH FY 89 OR FY 90. NRA CONSIDERS THIS AN UNACCEPTABLE SITUATION AND OFFERS THE FOLLOWING SCHEDULE WHICH WOULD INSTALL THE MODERNIZATION PACKAGE AT THE MAXIMUM RATE CONSISTENT WITH PRESENT INSTALLATION CAPABILITY.

P-3A/B TAC/NAVMOD INDUCTION RATE AND COST
(COST IN $ MILLIONS, FY 82 DOLLARS)

	FY 81	FY 82	FY 83	FY 84
P-3A/B	34	36	36	24
COST	47.5	50.4	50.4	33.6

RECOMMENDATION

THAT THE CONGRESS FUND A P-3A/B TACTICAL/NAVIGATION MODERNIZATION OF 36 RESERVE AIRCRAFT IN FY 1982 AT A COST OF $50.4 MILLION, AN INCREASE OF 21 AIRCRAFT AND $30.3 MILLION OVER THE BUDGET SUBMISSION AS PROVIDED FOR BY THE FY 82 DEFENSE AUTHORIZATION BILL. (INCLUDED IN THE APPENDIX IS A FACT SHEET ON THE P-3A/B TAC/NAV MOD)

P-3C Procurement

The Senate Authorization Bill provided for two P-3C Orion aircraft for the Naval Air Reserve. Although the Authorization Conference has not been held as yet, NRA fervently hopes that those aircraft will stay in the final Bill. The approval of an increased pace in the P-3A/B TAC/NAV MOD, the approval of the purchase of DC-9 aircraft and the procurement of new P-3C Orion aircraft would combine to do more for the Naval Air Reserve morale and combat readiness than has happened in any year in recent history. The Naval Reserve VP squadrons fly operational missions on a regular basis and would be among the first of the Reserve units to be called in case of an emergency. At the current procurement rate of 12 A/C each year, the first Reserve P-3 squadron would have to be disestablished in the early 1990s. A steady procurement of 20 A/C each year commencing in FY 83 would have to be maintained in order to retain the present force.

The Naval Air Reserve is required to provide a total of 72 crews (3 crews/active squadron/ 24 squadrons) for the active P-3C squadrons. The only way such a crew can be properly trained or kept trained is in P-3C aircraft. Thus, P-3C aircraft in the Naval Reserve helps fulfill a fleet need for augmentation crews upon mobilization. Increasing the P-3C buy also improves the cost/unit ratio.

The Naval Reserve Association strongly urges the funding of P-3C aircraft for the Naval Reserve included in the FY 1982 Defense Authorization Bill.

Navy Aircraft Procurement Plan

The people of this country have recognized the crying need for a much stronger defense posture in order to deter aggression and to respond to it when required. They have placed in power an Administration dedicated to that cause. Most new members of Congress have come with that charge and those continuing members have had that charge reinforced. We now ask the Congress to carry out a portion of that clear mandate by authorizing the procurement of naval aircraft that are essential if the Department of the Navy is to carry out its mission. The cost of course, is considerable but this year should provide the turning point for this sorry state of affairs within naval aviation.

With this in mind, NRA has conducted an examination of the total needs for Fiscal Year 1982 and the remainder of the FYDP years. It represents the details of the need to which Navy witnesses have testified both personally and professionally. It takes into account the ability of the Navy to assimilate and effectively utilize the assets as well as the capability of industry to produce

THOSE ASSETS. IT IS PREDICATED ON THE CURRENT OPERATION OF 12 AIRWINGS. IF THIS NUMBER IS INCREASED TO 13 OR 15 AIRWINGS, CORRESPONDING ASSET INCREASES WILL BE REQUIRED. IN SOME CASES, PRODUCTION QUANTITIES CAN BE READILY INCREASED BUT IN OTHERS, IT WILL BE MORE DIFFICULT FOR INDUSTRY TO RESPOND. IN THIS REGARD, WE BELIEVE IT IS TIME TO INITIATE A BETTER PARTNERSHIP BETWEEN GOVERNMENT AND INDUSTRY IN DEVELOPING AND INSURING CAPABILITIES TO RESPOND TO OUR DEFENSE NEEDS. MANY THINGS CAN BE DONE. ONE EXAMPLE IS TO INSTITUTE MULTI-YEAR PROCUREMENT TO THE GREATEST EXTENT POSSIBLE SO THAT BETTER PLANNING AND ECONOMIES OF SCALE CAN BE REALIZED.

THE PLAN THAT NRA HAS DEVELOPED IS SHOWN IN APPENDIX A. SOME SPECIFICS ARE DISCUSSED IN MORE DETAIL.

THE PLAN FOR FY 83-86 IS THE CARTER PLAN WHICH WE BELIEVE TO BE COMPLETELY INADEQUATE TO EVEN OFFSET NORMAL AIRCRAFT ATTRITION. NRA IS VERY PLEASED TO NOTE THAT THE REAGAN ADMINISTRATION HAS MOVED OUT POSITIVELY BY INCREASING SIGNIFICANTLY THE PROPOSED FY 82 NAVAL AIRCRAFT PROCUREMENT PLAN, SOMETHING THE CONGRESS HAS BEEN TRYING TO DO ON ITS OWN INITIATIVE FOR SEVERAL YEARS. WE HOPE AND TRUST THAT THE OUT-YEAR PLAN WILL ALSO PROVIDE FOR THE MODERNIZATION OF THE NAVAL RESERVE AIRCRAFT.

AN AREA NEEDING IMMEDIATE ATTENTION IS THE PROCUREMENT OF CARRIER-ON-BOARD DELIVERY (COD) AIRCRAFT. THE DIRE NEEDS OF THIS PROGRAM MUST BE POSITIVELY SATISFIED ESPECIALLY IN LIGHT OF INCREASED EMPHASIS ON SEAPOWER PROJECTION CENTERED AROUND THE AIRCRAFT CARRIER. THE PROLONGED PERIODS OF INDIAN OCEAN OPERATIONS EXTENDED THE NAVY'S LOGISTICS CAPABILITIES TO THE LIMITS AND MAY HAVE EVEN OVER EXTENDED THESE LIMITS. THE PRESENT (COD) INVENTORY CAN BARELY HANDLE THE PEACETIME TEMPO OF OPERATIONS. WARTIME OPERATIONS WOULD DEPLETE THE PARTS SUPPLY AT A RATE SEVERAL TIMES THAT OF THE CAPABILITY OF THE COD AIRCRAFT TO SUPPLY THE PARTS TO THE FLEET. RESUPPLY OF SUCH ITEMS AS ENGINES, ROTOR BLADES, MISSILES WILL DEMAND A COD FLEET WELL IN EXCESS OF PRESENT ASSETS. NRA RECOMMENDS THAT THE CONGRESS EXAMINE VERY CAREFULLY THE NAVY'S COD REQUIREMENTS.

SUMMARY

MR. CHAIRMAN, THE NAVAL RESERVE ASSOCIATION CALLS FOR A TOTAL FORCE APPROACH TO DETERMINING WHAT THE NAVAL RESERVE ROLE IS IN THE DEFENSE PICTURE AND A TOTAL APPROACH TO NAVAL RESERVE REQUIREMENTS TO MEET THAT ROLE.

NAVY REQUIREMENTS WHICH CANNOT BE FULFILLED BY THE NAVAL RESERVE SHOULD BE MET BY THE ACTIVE FORCE. THIS IS THE MOST COST EFFECTIVE METHOD OF BUILDING

Naval Forces. The cost of maintaining a Reservist in a billet varies from 1/5 that of an active duty sailor to a fully combat capable Reserve aircraft squadron or ship which probably runs between 50%-60% of an active unit. This advantage in cost has never been exploited to a significant degree in the Navy. No doubt this can be rationalized by the planners who point out the deployment requirements faced by the Navy, and to a significant extent that is a legitimate point. However, it does not work to the exclusion of Reserve participation in the hardware Navy-ships, aircraft and SeaBees for example. The formula for determining NRF requirements should be Wartime Requirements minus Peacetime Requirements equals Naval Reserve Force.

The Naval Reserve Association supports the language of the FY 1981 Defense Appropriations Bill concerning the Naval Reserve Force ships including their management and control as well as certain funding provisions which we discussed earlier.

We strongly support funding an increase in Naval Reserve strength to 97,000 in FY 1982 as a logical interim step to meet NAMMUS validated requirements and to commence a program to identify additional Reservists to fill the shortfall of 22,000 critical ratings in the Navy today. With a wartime requirement shortage of 49,000 trained personnel all possible steps should be taken to solve the problem. It cannot be done quickly. The Navy has been short approximately 20,000 skill ratings for years but has been reluctant for some reason to look to Reserve assets. Since Manpower equates to Seapower, the committee's help in this matter would be welcome.

Part of the effort for increased readiness is the airlift package of used DC-9s which we referred to earlier in this testimony. This capability is sorely needed; not only for wartime support, but for Reserve peacetime requirements of getting the Reservists to the training platform on a regular basis.

We ask that the committee support a quantum increase in the readiness and capability of our Reserve Maritime Patrol Force by funding the increased tempo of the Tactical/Navigation Modernization of the P-3A/Bs and for the procurement of two P-3C Orions for the Naval Reserve.

Mr. Chairman, Naval Reservists are ready to assume a greater role in the defense of this nation. The team of Congress and the Administration taking a positive approach to building a strong Navy can accomplish the mission and obtain first rate units, at significant savings to the taxpayer, by fully utilizing ready assets of the Naval Reserve.

I close by citing one of the conclusions of the Reserve Forces Policy Board study conclusions and I quote:

"Despite the impressive readiness history of the Reserve Forces, Active Force personnel are inclined to believe that the Reserve Forces could not cope with the latest high technology systems. This skeptical attitude is probably the result of a lack of experience with and knowledge of Reserve capabilities and accomplishments and may be magnified by the stresses caused by the absorption of such systems into the Active Force."

Thank you, Mr. Chairman, that concludes my testimony. I will attempt to answer any questions you or your committee might wish to ask at this time.

RESUME

PHILIP W. SMITH
Rear Admiral, U.S. Naval Reserve

Resident of Miami, Florida.

Entered the Navy in 1942 as an aviation cadet, commissioned in 1944 and served as a pilot with Patrol Bombing Squadron 116 in the Western Pacific in WW-2.

Recalled to active duty during the Korean War and served in a Navy transport squadron flying to Japan, Korea and Alaska. Flew the Bob Hope Christmas Show 1952-53 to Alaska and the Far East.

Member and Commanding Officer of Naval Reserve transport squadrons at NAS Opa Locka and NAS Jacksonville 1955-1972. During this time he flew four volunteer transport missions to Viet Nam, support missions to Cuba during the Bay of Pigs and the blockade, and numerous periods in the Mediterranean supporting the Sixth Fleet and NATO. Recently served on active duty for 13 months in the Pentagon and in New Orleans as Director of Navy Air Logistics Office. His immediate past assignment was as Deputy Chief of Staff, Commander Naval Air Force, Atlantic. Current assignment, Area Commander, Antilles Defense Command.

Elected as President of the Naval Reserve Association in October 1979.

In civilian life a practicing attorney and a retired Captain with Delta Air Lines, Inc.

The Navy Organic Logistics Airlift Requirements:

		FY 81	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
Fleet Requirements								
Total Operational*	LANT	6	6	9	9	9	9	9
	MED	0	2	3	3	3	3	3
	PAC	6	6	6	9	9	9	9
	USMC	2	2	2	4	4	4	4
	TOTAL	14	16	20	25	25	25	25
Total Additional C9Bs Required*	LANT	3	3	0				
	MED	3	1	0				
	PAC	3	3	3				
	USMC	2	2	2				
	TOTAL	11	9	5	0	0	0	0
Naval Reserve Needs to Replace C-118s								
DC-9 Lease or Procurement		12	12	12	12	12	0	0
Operational C-9Bs*		1	1	1	2	8	14	15
Additional Needs		2	2	2	1	0	1	0
Total Fleet & Reserve Shortage								
Fleet & USMC		11	9	5	0	0	0	
Reserve		2	2	2	1	0	1	
Total Then FY*		13	11	7	1	0	1	0
Congressional Program								
Year Approved		2						
For Delivery In		1	2**					
DC-9 Lease Approval Required		12	12	12	12	12		
Additional C-9B Approval Required		4	6	6	6	4***		
C-9B Delivery Schedule*				4	6	6	6	4

* Based on Program Approval by Congress.

** 1 C-9B previously approved in FY 79.

*** Three of these A/C are for pipeline requirement of 6.1% of total A/C (requirements are based upon Department of Defense Tactical Airlift Modernizaiton Study (DOTAM) findings).

FACTS - NAVY AIRLIFT MODERNIZATION

1. AIRLIFT CONSOLIDATION UNDER MAC HAS BEEN ACCOMPLISHED TO THE MAXIMUM BY NAVY. AIR FORCE AGREES THAT THE REMAINING 20% IS UNIQUE TO THE NEEDS OF THE NAVY AND SHOULD BE SATISFIED BY NAVY ORGANIC AIRLIFT.

2. NAVY UNIQUE AIRLIFT NEEDS ARE CHARACTERIZED BY

   SHORT LEAD TIME,
   LOW VOLUME,
   HIGH FREQUENCY

   OF DEMANDS TO A MULTIPLICITY OF UNPREDICTABLE FLEET LOCATIONS FOR SATISFACTION OF URGENT REQUIREMENTS.

3. CONGRESSIONAL HEARINGS CONSISTENTLY HAVE RESULTED IN ANNUAL SUPPORT FOR NAVY INTRA-THEATER AIRLIFT MODERNIZATION.

4. A PORTION OF THE REQUIREMENT IS BEING SATISFIED BY ANTIQUE C-118 AIRCRAFT WHICH ARE BEING PHASED OUT WITH NO REPLACEMENT AVAILABLE EXCEPT THE PRESENT C-9B FLEET. TO EVEN MAINTAIN THE STATUS QUO, A SIGNIFICANT C-9B PROCUREMENT PROGRAM IS REQUIRED.

5. DEPUTY CHIEF OF NAVAL OPERATIONS (AIR WARFARE) TESTIFIED BEFORE SASC (MARCH 1980) THAT PROCUREMENT RECOMMENDATION WAS SIX C-9B AIRCRAFT IN FY-81. THIS WAS A COMPROMISE IN THAT 17 C-9BS WERE THE ACTUAL REQUIREMENT FOR FY-81.

6. DEFENSE TACTICAL AIRLIFT MODERNIZATION (DODTAM) STUDY CONDUCTED BY OSD (JANUARY-JULY 1978), CONFIRMED THE NEED FOR 37 ADDITIONAL C-9BS.

7. HASC IN MARCH 1980 ADDED SIX C-9B AIRCRAFT TO FY-81 DEFENSE AUTHORIZATION BILL.

8. JOINT HOUSE-SENATE CONFERENCE COMMITTEE AUTHORIZED TWO C-9BS FOR FY-81 WHICH WERE SUBSEQUENTLY FUNDED.

9. IMMEDIATE, RESPONSIVE, WARTIME AIRLIFT TO FLEET COMMANDERS AROUND THE WORLD IS IMPERATIVE. A MODEST NAVY ORGANIC AIRLIFT CAPABILITY HAS BEEN CLEARLY SHOWN TO BE THE ONLY METHOD OF PROVIDING THE REQUISITE RESPONSE. CAPABILITY UTILIZED FULLY IN PEACETIME TO PROVIDE REQUIRED READINESS TRAINING AND AIRLIFT FOR FLEET AND RESERVE SUPPORT.

10. PROCUREMENT OF C-9BS IS THE LOWEST COST OPTION TO SATISFY UNIQUE NAVY INTRA-THEATER NEEDS. ALL OTHER REQUIREMENTS SATISFIED BY MAC OR MTMC.

11. C-9B HAS BEST DISPATCH RELIABILITY RATE (99.5% IN CONUS) OF ANY OPERATIONAL AIRCRAFT IN THE MILITARY INVENTORY.

12. C-9B AIRLIFT IS OPERATED BY THE NAVAL RESERVE FOR THE ENTIRE NAVY - ACTIVE AND WEEKEND WARRIOR.

13. PEACETIME USE BY NAVAL RESERVE IS ESSENTIAL TO THE READINESS AND PERSONNEL STABILITY OF THE NAVAL RESERVE. DUE TO THE NEED TO PROVIDE HANDS-ON TRAINING TO SURFACE RESERVISTS, THE READINESS AND STABILITY OF THE NAVAL RESERVE PROGRAM IS CLOSELY RELATED TO A RESPONSIVE AND ECONOMICAL PEACETIME AIRLIFT.

14. LACK OF AIRLIFT SUPPORT WOULD SERIOUSLY DEGRADE READINESS OF THE NAVAL RESERVE FORCE.

15. TITLE 10 USC 5012(B) DIRECTS NAVY ORGANIC "AIR TRANSPORT ESSENTIAL FOR NAVAL OPERATIONS". IMMEDIATE MODERNIZATION IS THE ONLY WAY THAT NAVY CAN CONTINUE THIS CAPABILITY.

16. A MULTI YEAR PROCUREMENT SHOULD BE DIRECTED TO OBTAIN THE BEST PRICE AND AN ORDERLY DELIVERY SCHEDULE.

17. THE PROGRAM WHICHWOULD HAVE BEST SATISFIED THE NAVY REQUIREMENT IN CONSTANT FY- 82 DOLLARS FOLLOWS:

FISCAL YEAR	82	83	84	85	82-85
C-9B (FLYAWAY)	6/$120.9M	6/120.9M	6/120.9M	8/161.2M	26/523.9M
SITE SUPPORT (2 PER YEAR)	2.1M	2.1M	2.1M	2.1M	8.4M
SPARES	10.5M	10.5M	10.5M	10.5M	42.0M

18. Present C-118 aircraft deteriorating at greater than planned rate. Loss of trained squadron personnel threatened as C-118 squadrons disestablished due to lack of aircraft.

19. Short term stop gap measure is to buy used DC-9s excess to airline requirements.

Recommend - that the Appropriations Committee fund FY 1982 Defense Authorization Bill provisions for the purchase of used DC-9s for the Naval Reserve.

June 1981

FACTS - P-3A/B TAC/NAV MODERNIZATION

1. Threat of Soviet submarine force is probably greatest of all threats to our nation's survivability and threat is increasing.

2. It is incumbent upon defense planners to provide maximum capability to counter Soviet underseas threat.

3. Tactical/Navigation Modernization for P-3A/B Aircraft provides the Reserve aircraft with P-3C baseline capability.

4. Provides major inprovements in critical areas of Tactics, Geographic Navigation, Tactical Display, Data Management, Reliability Maintenance, Crew Workload and System integrity.

5. ASW capability of modernized aircrat is 75% greater than those unmodified.

6. Capability of unmodified aircraft to conduct ASW maritime missions is virtually nil.

7. All USN aircraft are modernized - Reserve mods commenced this year.

8. Failure to provide modernization would constitute planned obsolesence.

9. Reserve P-3 squadrons would most likely be recalled early in heightened world tension situation to be deployed around the world.

10. Navy budgeted plan for FY 82 decreased from 28 planned to 15 budgeted at cost of $20.1 Million.

11. Navy plan would leave a large number of unmodified aircraft flying between FY 1986 and FY 1989 or 1990 depending upon P-3C procurement rate.

12. NRA plan would modify all Reserve aircraft by end of FY 1984, thus significantly increasing capability of Navy Maritime Patrol Air.

13. NRA plan is as follows:

P-3A/B TAC/NAV MOD

	FY 1981	FY 1982	FY 1983	FY 1984	TOTAL
Induction Rate	34	36	36	24	130
Cost (Millions)	$47.5	$50.4	$50.4	$33.6	$181.9

14. Cost for FY 82 program is $30.3 Million over budgeted request.

15. Both Authorization Committees approved the addition of $30.3 Million for 21 more aircraft than the budget submitted.

16. Recommendation: That the Congress fund the modernization of 36 P-3A/B aircraft for FY-82 at the cost of $50.4 Million, an increase of $30.3 Million over the budgeted request.

NAVAL AVIATION PROCUREMENT REQUIREMENTS

AIRCRAFT TYPE	FY 81	FY 82			FY 83		FY 84		FY 85		FY 86	
	APPROVED	CARTER BUDGET	REV BUDGET	NEED	PLAN	NEED	PLAN	NEED	PLAN	NEED	PLAN	NEED
F-14A	30	24	30	30	12	30	6	30		30		30
F/A-18	60	58	63	63	84	84	108	108	143	143	209	209
EA-6B	6	2	6	6	2	6	2	6	2	6	3	6
P-3C	12	6	12	12	6	12	6	12	6	12	12	16
CH-53E	14	11	14	14	11	14	11	14	11	14	11	14
C-9B	2			6		6		6		4		4
E-2C	6	6	6	6	6	6	6	6	6	6	6	6
EC-130Q	1	2	2	2	2	2	3	3	2	2		
A-6E	12	4	12	12	4	12	4	12	4	12	4	12
AV-8B (INCL 10 (T) AV-8)				12		24		54		58		60
AH-1T							22	22	22	22		
SH-60B		8	8	18	48	48	64	64	74	64	10	64
TH-57	7			38		20		20		20		20
LAMPS-1 (SH-2F)	ADVPROC			18		18		18		18		18
US-3A (CONV. OF NON-ASW S-3A				2								
T34C	45			104		76						
COD				ADVPROC		8	8	8	8	8	8	8
	195	121	153	343	175	366	240	383	278	419	263	467

Shipbuilders Council of America

STATEMENT OF STUART S. ADAMSON, VICE PRESIDENT, SHIPBUILDERS COUNCIL OF AMERICA

ACCOMPANIED BY:

GORDON H. FALT, VICE PRESIDENT OF THE NEW ENGLAND SHIP REPAIR YARD ASSOCIATION

MICHAEL J. GALLAGHER, PRESIDENT OF THE NEW YORK-NEW JERSEY DRYDOCK ASSOCIATION

WALTER A. LARSEN, CHAIRMAN OF THE WESTERN SHIPBUILDING ASSOCIATION

MAINTENANCE AND MODERNIZATION OF NAVAL SHIPS

Senator Rudman [presiding]. I will call on Mr. Stuart Adamson, vice president of the Shipbuilders Council of America. Mr. Adamson, if you will introduce the others who are with you this morning, we will incorporate your entire statement in the record and you may summarize that.

Mr. Adamson. Thank you.

I am Stuart S. Adamson, vice president of the Shipbuilders Council of America, a national industry association composed of major shipbuilders, ship repairers, and ship component manufacturers. With me today are Mr. Gordon H. Falt, vice president of the New England Ship Repair Yard Association, Mr. Michael J. Gallagher, president of the New York-New Jersey Drydock Association, and Mr. Walter A. Larsen, chairman of the Western Shipbuilding Association.

We appear here today, as we traditionally have in years past, to urge your distinguished subcommittee to give favorable consideration to the budgets requested by the Department of Defense for the maintenance and modernization of naval ships. Further, and with particular emphasis, we ask that you assure that an equitable share of this work is assigned to the private sector.

Naval ship repairs are a significant element of the private sector's shipyard activities. At the present time, approximately 91,000 private shipyard workers are devoted to Navy work. Twenty-five percent of those workers are involved in light repair. The importance of this effort is amplified by the fact that ship repair is predominantly accomplished in yards not currently associated with naval new construction, thereby sustaining the broadest possible industrial base skilled in the ways of Navy work. It hardly seems necessary to remind this subcommittee of the vital role the shipyard mobilization base plays in support of national security.

Maintaining the viability of this important industrial sector is particularly critical at this point in time. For the past 2 years, our industry has been caught up in a declining market. The number of shipyard employees engaged in the construction and maintenance of oceangoing ships, both commercial and military, has declined by 25,000 workers since 1978.

In naval ship repair, as an example, through most of the 1970's approximately 90 active naval ships were scheduled for overhaul each year. The average number for fiscal years 1980, 1981, and 1982 will be 62 ships, a 30-percent decrease. Compounding this matter is the ongoing decline in the level of naval new construction. As a consequence, the building yards are presently seeking a greater share of the repair business to mitigate employment losses. The net result is that there are now more qualified shipyards in pursuit of fewer contracts.

It is in this context that we ask your support in maximizing the appropriations available for immediate shipyard activity. There is an unquestioned view that our country's naval strength must be increased. To make this so, there must be a skilled industrial base to support that effort.

Current events suggest that we can anticipate a growing naval shipbuilding program. However, the nature of that business is such that new ships funded this or next year will not create immediate employment of our skilled workers—the extended contracting, design, and material ordering processes required preclude that. To halt the current decline of the shipyard base, we need work now, not 1, 2, or 3 years hence. We need a fair share of the naval ship repair and conversion business.

To this end, we respectfully request that adequate funding be made available to undertake and manage required near-term naval ship maintenance and modernization—most particularly the near-term work reflected in the Navy's request for repair, alteration, and overhaul funds within their operations and maintenance budget, and of equal importance, the conversion programs, such as the reactivation of the battleships *New Jersey* and *Iowa* contained in the Navy's shipbuilding and conversion budget request.

Thank you, Mr. Chairman.

This concludes my statement. With your permission, Mr. Chairman, at this point I would like to call on my colleague to briefly expand on my remarks.

WESTERN SHIPBUILDING ASSOCIATION

STATEMENT OF WALTER A. LARSEN, CHAIRMAN OF THE BOARD OF THE WESTERN SHIPBUILDING ASSOCIATION

REPAIR, ALTERATION, AND MAINTENANCE OF U.S. SHIPS

Mr. LARSEN. Chairman, members of the subcommittee, my name is Walter A. Larsen. I am chairman of the board of Western Shipbuilding Association. Our association is a coalition of industry and labor, representing shipbuilding and ship repair yards, labor organizations, suppliers, subcontractors, manufacturers, and other related segments of the maritime industry located on the Pacific Coast and in the State of Hawaii.

I appreciate very much this opportunity to appear before the respected members of this subcommittee to express the views of the membership of Western Shipbuilding Association on the subject of defense appropriations as it concerns the repair, alteration, and maintenance of U.S. naval vessels during fiscal 1982.

We fully support and urge your approval of the total amount of $3.9 billion requested by the Department of the Navy for funding fiscal 1982 Navy ship repair, alteration, and overhaul work. However, we strongly disagree with the requested $2.8 billion ceiling on public yard expenditures, which would leave $1.1 billion, only 28 percent of the total appropriation, for accomplishment of Navy ship work in private yards.

Compared with fiscal 1981, this would actually reduce funds available to the private sector by more than $100 million, while increasing Navy shipyard funding by more than $250 million. This inordinate distribution is a major departure from the traditional distribution pattern of recent years, and we respectfully urge that, in marking up the fiscal 1982 Defense Appropriation Act, you reduce the public yard ceiling to coincide with that of recent years.

Recent Navy testimony has indicated that the fiscal 1980 workload distribution resulted in a 66.5 percent public yard share versus 33.5 percent for private yards. Limitations in the fiscal 1981 bill, which includes work still in process, should result in a public/private share ratio similar to that of 1980. Now, the fiscal 1982 request proposes to increase the public yard share to 72 percent and, consequently, decrease the private industry share to 28 percent. This equates to a reduction of more than 16 percent in dollar amount of the private sector's share of the workload in fiscal 1982 and, factored for inflation, we actually face a reduction of 22 to 25 percent.

This inordinate distribution, if allowed, would have a severe adverse impact on the resource utilization balance needed to best serve the public interest.

EROSION OF DEFENSE MOBILIZATION BASE

There is an increasing amount of awareness and concern about the erosion of our defense mobilization base. Believe me, this erosion is real in the ship repair industry on the Pacific Coast. Within the past 3 years, two major ship repair yards have closed on the west coast, and within the last several months a major shipbuilding yard on the east coast has closed. We seem to have a dilemma, public yards requesting proportionate increased funding and elimination of manpower ceilings in their facilities, while on the other side private yards are closing down.

One does not have to look too far back in history to learn where the major burden rested in respect to fleet readiness and accelerated preparedness. World War II, Korea, Vietnam, each time private industry was called upon for the major burden, and each time it was up to the task. Unless the current erosion of the private ship repair industry is abated, we will reach the point of possible unacceptable response efforts in the not too distant future. We request your serious consideration of this point.

We submit that the most cost effective way to accomplish the planned workload in fiscal 1982, and beyond, is to better utilize existing private yard capacity. Private yard capacity for ship repair is currently substantially underutilized. Future workload forecasts on the west coast indicate that this underutilization will continue. In fact, private industry on the west coast currently has capacity to cost effectively accomplish substantially more that its present one-third share workload. Given a reasonable amount of assurance of continuity of workload, that capacity would be increased and become even more efficient and productive.

On the west coast, we have been hearing a considerable amount of dialog about reducing the size of government, Federal, State and local. We fail to see how increasing the public year share of the workload will accomplish this admirable goal.

Finally, rest assured, that Western Shipbuilding Association recognizes the importance of having a second-to-none defense capability. The Navy arm of that capability has an awesome responsibility; it protects an extremely large area of aquatic real estate among other duties. This mandates a need for a high degree of fleet readiness. Approval of the Navy's requested funds for ship repair, alteration and overhaul with the proper distribution of funds to the public/private sectors of this industry will assure the degree of readiness required.

Thank you again for this opportunity to appear here today an express our views on this highly important subject.

Senator RUDMAN. We will look into the reasoning of that ceiling as we get into the mark up of this bill.

NEW ENGLAND SHIP REPAIR YARD ASSOCIATION

STATEMENT OF GORDON H. FALT, JR., DIRECTOR OF MARKETING, OVERHAUL AND REPAIR, BATH IRON WORKS CORP. AND VICE PRESIDENT OF THE NEW ENGLAND SHIP REPAIR YARD ASSOCIATION

Mr. FALT. Mr. Chairman, members of the committee, I am director of marketing, overhaul and repair, Bath Iron Works Corp.

Senator RUDMAN. I will be up to your place on Saturday. I will be up there for the commissioning of the new frigate.

Mr. FALT. Today I am speaking as the vice president of the New England Ship Repair Yard Association. The members of the New England Ship Repair Yard Association appreciate this opportunity to express their views.

Today our naval fleet is overextended to meet our Nation's requirements on the many oceans of the world. It is essential that these ships, many nearing or past normal retirement age, be kept in a first-class state of material readiness.

The members of our association have invested heavily to improve their facilities so that they can meet the ever-increasing demands of the U.S. Navy to complete high quality overhauls on time. However, now that we have the facilities to meet the Navy's requirements, there are few naval ships offered for bid in our area. This is caused by several factors.

The Navy continues to overhaul a large percentage of their ships in public yards even though studies show that overhauls cost less in the private sector. Also, the home port rule, which requires that ships be overhauled in the home port area when adequate competition exists, prevents many ships from being bid in New England.

A review of overhaul pricing shows that New England overhaul prices are among the lowest in the country. However, in order to sustain the efficiencies that bring about low prices, a steady workload is imperative.

Our association suggests that the Navy can continue to receive the benefits of this competitive market by assigning more ships to the naval base at Newport, R.I. This excellent base, where in 1974

80 ships were home ported, has the facilities and services to accommodate many more ships than the few presently stationed there.

We ask this committee to support the Navy's request for overhaul funds adequate to meet the needs of an overworked fleet. Also, we ask that the 30 percent repair volume requirement established for private sector repair yard be increased to at least 40 percent. Substantial savings would quite likely be realized if more ships were overhauled in the private sector and particularly in New England.

Senator RUDMAN. Thank you very much.

NEW YORK-NEW JERSEY DRYDOCK ASSOCIATION

STATEMENT OF MICHAEL J. GALLAGHER, EXECUTIVE VICE PRESIDENT OF RODERMOND INDUSTRIES, INC. OF JERSEY CITY, AND PRESIDENT OF THE NEW YORK-NEW JERSEY DRY DOCK ASSOCIATION

Mr. GALLAGHER. On behalf of the New York-New Jersey Dry Dock Association, I wish to thank you for the opportunity to once again testify before your committee.

My name is Michael J. Gallagher. I am the executive vice president of Rodermond Industries, Inc. of Jersey City, N.J., and president of the New York-New Jersey Dry Dock Association.

The New York-New Jersey Dry Dock Association represents every dry dock and ship repair yard operating in the Port of New York and directly employ some 4,000 persons.

I am here with other representatives of the private ship repair industry to ask you support for the proposed fiscal 1982 appropriations bill for naval repair alterations and overhaul of naval vessels. We have been assured that the private ship repair yards will receive approximately 30 percent of this repair work.

I think the actual figure is 28 percent according to the law. It is imperative that the private ship repair industry is assured a continued opportunity to bid competitively on naval ship repair work. Naval ship repair work is vital to our industry if we are to maintain a support base in times of national emergency.

Over the past few years the New York and New Jersey repair yards have been given an opportunity to bid on naval vessels home ported in other districts. This has been a tremendous economical boost for our members. The once closed Brooklyn Navy Yard and the Bayonne Naval Graving Dock have been reopened and refurbished by two of our member firms and now stand ready to respond immediately to a national emergency.

The members of the New York-New Jersey Dry Dock Association thank you for this opportunity to participate and your past support.

Senator RUDMAN. Thank you very much. We appreciate your statements.

The next witness will be Mr. Michael Buckley, national executive director, Naval Enlisted Reserve Association.

Mr. Buckley, your full statement will be incorporated in the record. We would appreciate it if you would set forth a summary of your statement.

NAVAL ENLISTED RESERVE ASSOCIATION

STATEMENT OF SENIOR CHIEF GUNNERS MATE MICHAEL BUCKLEY, USNR, (RET.), NATIONAL EXECUTIVE DIRECTOR OF THE NAVAL ENLISTED RESERVE ASSOCIATION

NAVAL RESERVE STRENGTHS

Mr. BUCKLEY. That is what I have, sir. I have a summary.

Senator RUDMAN. Thank you very much.

Mr. BUCKLEY. Mr. Chairman and members of the committee, our Association is appearing before this committee to discuss the proposed fiscal year 1982 Defense appropriation concerning the naval reservists. Our first issue is Naval Reserve strength. Last year the Naval Enlisted Reserve Association suggested that Congress make provision for a realistic rate of growth to meet the Navy's contingency needs and fund the Naval Reserve at 92,000 selected naval reservists.

Congress appropriated the money for the 92,000 naval reservists in fiscal year 1981 but the Defense Department ignored Congress and established the Naval Reserve at 87,000, using the additional money for other purposes.

The naval buildup to a 600-ship Navy manpower requirement for mobilization became very essential. The Naval Enlisted Reserve Association recommends that a realistic rate of growth of 97,000 selected naval reservists be funded for fiscal year 1982.

NAVAL RESERVE FORCE

Our second most important issue is the Naval Reserve Force program. Last year the Defense appropriation bill directed the Navy to take certain actions concerning the Naval Reserve Force ships including submission of a detailed implementation plan to the Congress. The Navy's implementation plan submitted does not follow the direction of the fiscal year 1981 Defense appropriation bill. Manning of the NRF ships was to be 50 percent selected reservists and 50 percent active duty TARS. The Navy changed the active manning to 25 percent TARS and 25 percent USN. The Navy was also to recall 100,000 TARS in fiscal 1981 but the delayed action of the Navy will result in approximately only 100 TARS being recalled in fiscal year 1981.

The surface TAR program will only implement some ratings and those ratings are E-4 through E-6. Our association feels that this is discriminating against all the surface ratings E-7 through E-9.

OPERATION AND MANAGEMENT CONTROL

The Navy is planning scheduling of NRF ships with the Chief of Naval Reserve and this scheduling will be coordinated with the TYCOMS. The TYCOMS will also be responsible for scheduling all other evolutions and remain responsible for material logistics and maintenance support of the NRF ships. This plan is not in accord with the congressional direction that placed operational control with the Chief of Naval Reserve. It is also the opinion of our organization that the Navy will use those ships for other commitments instead of the mission of antisubmarine warfare convoy escorts.

HOME PORTING

Mr. Chairman, finally the most important issue is home porting of these ships. Congress stated home porting of NRF ships will be based as much as possible on drilling reservists population. The Navy's plan puts three NRF ships in Newport, R.I. It just recently transferred two Reserve minesweepers to Newport, R.I.

Naval reservists drilling in Newport, R.I. are less than a thousand. Reservists in the New York City area are more than 3,000. The Navy's rationale for this plan is not in the best interest of the mission of the NRF ships. The Selected Reserve manning is the only major issue. Maintenance becomes a secondary issue.

In order to carry out their mission to train reservists to be ready for mobilization they need Selected Reserve manning and this becomes the primary concern and a major issue.

Mr. Chairman, if the Navy does not conform to the congressional direction the Naval Reserve Association predicts that the Navy will return to Congress and report in 2 years that the Naval Reserve cannot fulfill its responsibility on the NRF ships. That is, in the manning level.

The Naval Reserve Association strongly supports the testimony of the Naval Reserve Association with regard to the C-9B aircraft and the P-3TAC/NAV modernization for the Naval Reserve.

This completes my statement and if you or any members of the committee have any questions I will attempt to answer them or I will provide information at a later date.

Thank you.

[The prepared statement of Michael Buckley follows:]

NAVAL ENLISTED RESERVE ASSOCIATION
N E R A NATIONAL HEADQUARTERS
6703 FARRAGUT AVENUE, FALLS CHURCH, VIRGINIA 22042

Prepared Statement of Michael Buckley, USNR (Ret.)

NATIONAL EXECUTIVE DIRECTOR

Naval Enlisted Reserve Association

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE:

I PREFACE MY FORMAL STATEMENT WITH SINCERE APPRECIATION ON BEHALF OF THE NAVAL ENLISTED RESERVE ASSOCIATION, AND MYSELF FOR THE PRIVILEDGE AFFORDED US TODAY TO APPEAR BEFORE THIS COMMITTEE.

OUR PURPOSE IN APPEARING BEFORE THIS COMMITTEE IS TO DISCUSS THE PROPOSED FY 1982 DEFENSE APPROPRIATION BILL CONCERNING NAVAL RESERVE ISSUES.

THE FIRST ISSUE IS THE STRENGTH OF THE NAVAL RESERVE. LAST YEAR THE NAVAL ENLISTED RESERVE ASSOCIATION TESTIFIED THAT "NUMEROUS STUDIES HAVE BEEN CONDUCTED IN RECENT YEARS TO ESTABLISH THE SELECTED NAVAL RESERVE STRENGTH NEEDED FOR MOBILIZATION. CURRENTLY UNDER REVIEW IN DRAFT FORM IS THE NAVY MANPOWER MOBILIZATION SYSTEM (NAMMOS). ALL PREVIOUS STUDIES AND THE PRELIMINARY FINDINGS OF THE NAMMOS STUDY INDICATE A REQUIREMENT OF SOMETHING OVER 106,000 SELECTED RESERVISTS TO MEET THE NAVY'S CONTINGENCY NEEDS. RECOGNIZING THE REQUIREMENT FOR THE NAVAL RESERVE TO INCREASE FROM ITS PRESENT 87,000 LEVEL TO A STRENGTH APPROXIMATING 106,000, THE NAVAL ENLISTED RESERVE ASSOCIATION PROPOSED THAT THE CONGRESS MAKE PROVISIONS FOR A REALISTIC RATE OF GROWTH. IT WAS SUGGESTED THAT THESE TWO STRENGTH FIGURES BE LEGISLATIVELY ESTABLISHED AND FUNDED IN THE FY-81 DEFENSE BILL: A FORCE LEVEL FLOOR OF 87,000 AND A CEILING OF 92,000. THE PROPOSED LEGISLATION WOULD FURTHER STIPULATE THAT THE RPN (RESERVE PERSONNEL, NAVY) FUNDS PROVIDED (FOR DRILLS AND TWO-WEEK ACTIVE DUTY FOR TRAINING) FOR THE 5,000 MAN-YEAR-AVERAGE DIFFERENTIAL COULD NOT BE SPENT FOR ANY OTHER PURPOSE. THIS WOULD GIVE THE NAVAL RESERVE AN ASSURED AND STABLE BASE AND, AT THE SAME TIME, PROVIDE THE OPPORTUNITY TO ACHIEVE A MODEST RATE OF GROWTH TOWARD ITS REQUIRED STRENGTH."

MR. CHAIRMAN, THIS COMMITTEE IN CONFERENCE WITH THE HOUSE, PROVIDED FUNDING FOR A NAVAL SELECTED RESERVE AVERAGE STRENGTH OF 92,000. HOWEVER, IN EARLY DECEMBER 1980, THE OUTGOING DEPUTY

SECRETARY OF DEFENSE APPROVED A RECOMMENDATION PROPOSED BY OSD BUDGET ANALYSTS TO HOLD THE NAVAL RESERVE STRENGTH FOR FY 81 AT 87,000. THE $12.4 MILLION FUNDED FOR THE ADDITIONAL 5,000 BILLETS WAS DIRECTED FOR OTHER PURPOSES BY OSD. FY 81 AUTHORIZATION OF 87,000 WAS A STRENGTH FLOOR, NOT A CEILING OR END STRENGTH FIGURE.

MR. CHAIRMAN, THE ADMINISTRATION'S PLANS TO BUILD A 600 SHIP NAVY WHICH WILL REQUIRE A TREMENDOUS EFFORT TO RECRUIT AND TRAIN THE PERSONNEL TO MAN THE SHIPS AND THEIR SUPPORT. A SIGNIFICANT INCREASE IN NAVAL RESERVE STRENGTH SHOULD ALSO BE INCLUDED TO ALLOW FOR AUGMENTATION IN THE EVENT OF MOBILIZATION. IT IS ALSO THE MOST ECONOMICAL MEANS OF PROVIDING WARTIME ASSETS. NERA AGAIN STRONGLY RECOMMENDS THAT THE CONGRESS AUTHORIZE AND FUND A SELECTED NAVAL RESERVE STRENGTH OF 97,000 PERSONNEL FOR FISCAL YEAR 1982 AT AN ADDITIONAL COST OF APPROXIMATELY $31 MILLION, AND THAT THE APPROPRIATION BE FENCED FOR THE ADDITIONAL BILLETS. THIS WILL ALLOW FOR A REALISTIC RATE OF GROWTH TO THE NAMMOS IDENTIFIED REQUIREMENT UPON MOBILIZATION.

THE SECOND ISSUE AND PROBABLY THE MOST IMPORTANT ISSUE IS THE NAVAL RESERVE FORCE.

LAST YEAR THE DEFENSE APPROPRIATIONS BILL DIRECTED THE NAVY TO TAKE CERTAIN ACTIONS CONCERNING THE NAVAL RESERVE FORCE (NRF) SHIPS INCLUDING THE SUBMISSION OF A DETAILED IMPLEMENTATION PLAN TO THE CONGRESS BY 1 APRIL 1981. THE NAVY'S SUBMISSION OF THIS PLAN WAS 29 APRIL 1981. THE NAVAL ENLISTED RESERVE ASSOCIATION FEELS THE NAVYS PLAN IS IN CONFLICT TO THE APPROPRIATIONS CONFERENCE REPORT ON DEFENSE WHICH STATED:

1. SHIP MANNING - A CREW OF 50 PERCENT ACTIVE AND 50 PERCENT SELECTED RESERVE WITH A PHASE-IN OF TAR PERSONNEL TO REPLACE THE ACTIVE DUTY CREWS

2. SHIPS OPERATIONS - NRF ESCORTS WILL OPERATE UNDER THE DIRECTION OF THE CHIEF OF NAVAL RESERVE

3. COMMAND STRUCTURE - OPERATIONAL CONTROL OF THE RESERVE DESTROYERS WILL BE SHIFTED TO THE CHIEF OF NAVAL RESERVE

4. HOMEPORTING - NRF SHIPS WILL BE BASED AS MUCH AS POSSIBLE, ON THE DRILLING RESERVIST POPULATION AND THE FEASIBILITY OF COLLOCATING CAPABLE SIMA UNITS

5. REPLACEMENT SHIPS - THE NAVY WILL PROGRAM THE TRANSFER OF NEWER

REPLACEMENT SHIPS (FF-1052's, FFG-1's or FFG-7's) WITH AN OBJECTIVE OF GROWING TO A FORCE LEVEL OF NOT LESS THAN 24 SHIPS AT LEAST FOUR SHIPS WILL BE TRANSFERRED BY END FISCAL YEAR 1982 AND AT LEAST 12 SHIPS IN THE PERIOD FISCAL YEAR 1982-1987.

6. FUNDING - CHIEF OF NAVAL RESERVE SHALL CONTROL FUNDING OVER ALL NAVAL RESERVE ACTIVITIES. FUNDING FOR TAR PERSONNEL SHALL BE UNDER RPN APPROPRIATIONS.

THE NAVAL ENLISTED RESERVE ASSOCIATION FULLY SUPPORTS CONGRESSIONAL DIRECTIONS TO THE NAVY. HOWEVER, THE NAVY'S PLAN DOES NOT COMPLY WITH THE APPROPRIATIONS REPORT.

THE NAVY'S PLAN STATES A CREW MIX OF 50 PERCENT ACTIVE AND 50 PERCENT SELECTED RESERVE, WITH A PHASE-IN OF TAR PERSONNEL TO REPLACE HALF THE ACTIVE DUTY PERSONNEL IN THE CREW. THE COMMITTEE REPORT SAYS NOTHING OF REPLACING HALF THE CREW BUT CLEARLY STATES TO REPLACE THE FULL ACTIVE DUTY CREW WITH TAR PERSONNEL.

THE CONGRESSIONAL REPORT ALSO STATED THAT 1000 TARS WOULD BE RECALLED IN 1981. THE NAVY TO DATE HAS ORDERED THE RECALL OF ONLY 38 TARS AND WITH THE CONTINUED PROCRASTINATION OF THE PROGRAM RECALL OF TAR PERSONNEL WILL BE LIMITED TO APPROXIMATELY 100 BY THE END OF FY 81 INSTEAD OF 1,000.

THE RECALL OF THE TARS ARE IN THE RATES OF E4 THROUGH E6. UP TO NOW THE NAVY HAS BEEN CLAIMING UNTIL A FULL CAREER PATTERN HAS BEEN DEVELOPED E7 THROUGH E9 WILL BE KEPT IN PLACE AS SUPERVISORY PERSONNEL. PROJECTION OF A E9 TAR IS APPROXIMATELY 1990. THE NAVY IMPLEMENTATION PLAN PROPOSED THAT THE TAR SURFACE PROGRAM CAN ONLY INCLUDE THOSE RATINGS "WHICH AN ACCEPTABLE CAREER PATTERN CAN BE DEVELOPED". IF A CAREER PATTERN CAN BE DEVELOPED FOR ONE RATING IT CAN BE DEVELOPED TO INCLUDE ALL SURFACE RATINGS. NERA STRONGLY OPPOSES THE NAVYS PROPOSAL AS DISCRIMANTORY TO ALL SURFACE NAVAL RESERVISTS RATINGS AND RATES.

THE SHIPS OPERATION AND MANAGEMENT CONTROL GIVEN TO THE CHIEF OF NAVAL RESERVE BY THE CONGRESS IS REWARDED BY THE NAVYS PLAN AND ONLY GIVES THE CHIEF OF NAVAL RESERVE THE OPERATIONAL SCHEDULING OF THE FRIGATES. THE TYCOMS WILL CONTINUE TO BE RESPONSIBLE FOR SCHEDULING OF ALL OTHER EVOLUTIONS PLUS

MATERIAL, LOGISTIC AND MAINTENANCE SUPPORT OF THE NRF FRIGATES. NERA FORSEES MORE FLEET EXERCISES THAT ARE NOT MISSION ORIENTED AND LESS READINESS TRAINING FOR THE SELRES CREW AS WAS EXPERIENCED WITH NRF DESTROYERS. NERA STRONGLY SUPPORTS THAT FULL OPCON AND TYCOM MUST BE GIVEN TO THE CHIEF OF NAVAL RESERVE.

MR CHAIRMAN, THIS IS THE MOST HOMEPORTING IMPORTANT ASPECT OF THE NRF PROGRAM. THE SELECTED RESERVE MANNING OF THE SHIPS IS THE MAJOR ISSUE. IN ORDER TO CARRY OUT THE MISSION TO TRAIN RESERVISTS TO BE READY FOR MOBILIZATION, THE SELRES CREW IS NEEDED AND SELRES MANNING BECOMES THE PRIMARY CONCERN AND THE MAJOR ISSUE, MAINTENANCE BECOMES A SECONDARY ISSUE. IT IS VIRTUALLY IMPOSSIBLE TO MAN 3 NRF PLUS THE RECENT TRANSFER OF 2 MSO'S IN NEWPORT, R.I. NEWPORT AND ITS SURROUNDING AREAS HAVE LESS THAN 1,000 DRILLING RESERVES. CREWS FOR THE NRF WILL BE 450 AND THE MSO'S 120 OR 570 RESERVISTS.

THIS LEAVES APPROXIMATELY 400 RESERVISTS TO FILL BILLETS OF OTHER UNITS AT 6 NAVAL RESERVE CENTER SITES. THERE ARE OVER 3,000 DRILLING RESERVISTS IN THE NEW YORK AREA. EVIDENTLY NO CONSIDERATION WAS GIVEN TO HOMEPORTING IN NEW YORK OR POSSIBILITY TO PICK UP CREWS IN NY OR FORT SCHYLER. NERA STRONGLY RECOMMENDS THAT THE HOMEPORT OF NY BE CONSIDERED OR THE PICK UP OF CREWS BE INCLUDED IN PLANS AT LARGE POPULATION SITES. NERA MUST ALSO STATE THAT IF THE NAVY DOES NOT ABIDE BY THE DIRECTION IN THE FY 81 APPROPRIATION REPORT. THE NAVY WILL RETURN TO CONGRESS IN 2 YRS AND REPORT THAT THE NAVAL RESERVE COULD NOT MEET ITS COMMITMENTS TO THE NRF.

THE NAVAL ENLISTED RESERVE FULLY SUPPORTS THE POSITION AND TESTIMONY OF THE NAVAL RESERVE ASSOCIATION WITH REFERENCE TO THE C9B'S PURCHASE AND P-3A/B TACTICAL NAVIGATION MODERNIZATION (TAC/NAVMOD). MR CHAIRMAN OUR LAST ISSUE IS THAT OF READINESS. WE SUPPORT THE CHIEF OF NAVAL RESERVE FOR APPROPRIATIONS TO PROCURE MORE SBS SITES AND RTSS TERMINALS. THIS IS EQUIPMENT NEEDED TO UPDATE AND MODERNIZE THE NAVAL RESERVE AND ITS TRAINING PROGRAMS.

MR. CHAIRMAN, THIS COMPLETES OUR STATEMENT. IF YOU HAVE ANY QUESTIONS, I WILL BE HAPPY TO ANSWER THEM.

MANPOWER IN NEWPORT/NEW YORK AREAS

Senator RUDMAN. Thank you very much.

You can see the kind of problems that have been very, very vividly displayed by your testimony and the testimony of the people just before you. They want more ships stationed up in Newport because of the home porting rule on maintenance.

Of course you say that you think that fewer ships should be stationed there because of the manpower being greater in the New York area.

Mr. BUCKLEY. I was glad to hear the man from New Jersey say how ready they were with the equipment to take care of the ships down there.

Senator RUDMAN. Thank you very much. We appreciate it.

Mr. BUCKLEY. Thank you, sir.

Senator RUDMAN. Our next public witness will be C. A. "Mack" McKinney, senior vice president, Government Affairs, Non-Commissioned Officers Association of the United States.

Mr. McKinney, if you have an elaborate statement it will be incorporated in the record.

NON-COMMISSIONED OFFICERS ASSOCIATION OF THE UNITED STATES

STATEMENT OF MR. C. A. "MACK" McKINNEY, SENIOR VICE PRESIDENT, GOVERNMENT AFFAIRS, NON-COMMISSIONED OFFICERS ASSOCIATION OF THE UNITED STATES

ALL-VOLUNTEER FORCE RECRUITING PROBLEMS

Mr. MCKINNEY. Mr. Chairman, I appreciate this opportunity to be here today. I want to somewhat address the recruiting problem that I think we have in the All-Volunteer Force.

I know that we have comments of euphoria out there. Really although the armed services are hitting 100 percent of their quota, we have a shortfall compared to last year, of some 13,500 overall in the four branches and 19,200 in the U.S. Army alone. Although we have that euphoria we are not really enjoying success when we say we are going to increase our military services.

I think Congress has gone along in assisting the recruiting program and retention of NCO's which is very critical at this present time by increasing the pay and some of the allowances last year but we need to do a lot more. We have to keep these expert NCO's and petty officers available to do the job and train these young people and young officers. If we do not do that we may as well quit.

I just came back from our convention in Kansas City, arriving here yesterday. I was very pleased to have met with the five top enlisted chiefs of the military forces, including the Coast Guard, and they brought us a lot of objectives and goals that they would like us to support. I thought perhaps since I have already submitted my prepared statement that you may be interested in knowing what these top enlisted chiefs would like as far as their people programs are concerned.

Although I feel very strongly that our senior officers are really concerned about the situation that appears in our enlisted forces, they have the sympathy but I don't think they have the empathy because most of them have never been enlisted people before. So these come out of the enlisted people. This again, as I indicated, were from the top five enlisted chiefs of all the services.

They would like an increase in weight of household goods and shipments for all grades including E-4's under 2 years up to 1,500 pounds, and a dislocation allowance and dependents travel of E-4's under 2 years. This will run about $32.2 million.

MALT PROGRAM

They would like to see an increase in the monetary allowance in lieu of transportation, the MALT program plus per diem during PCS for service members. The current rate is 18.54 cents per mile and no per diem. I am sorry. That was previous, effective April 1, and it will be 7 cents per mile and $35 per day. They feel the rate should be in reality 16 cents per mile and $50 per day. This is $104.5 million in appropriations required.

We also want to see an increase in dependent MALT. The current rate is zero for under 2 years of age, 5 cents for 2 to 12 years and 7 cents for over 12 years rate. This is not very realistic in today's cost of travel. They feel that 10 cents per mile regardless of age is a more realistic figure and that would cost somewhere around $40.5 million.

They would like to see also established a CONUS temporary lodging entitlement which allows service members to claim up to a total of 4 days' reimbursement for hotel or hotel-like accommodations procured at their personal expense. This is around $42 million.

EXTENSION OF CHAMPUS

Senior NCO's also believe there is a pressing need for CHAMPUS to be extended to dependents dental care. Without going too much in that there is a bill and we hope the committee will see that such appropriations are provided for that.

Also they would like to see an annual ceiling of $1,000 per family on costs assessed to beneficiaries of all categories under the CHAMPUS program. This is in the case of catastrophic illnesses.

Allow a greater flexibility in the method for computing the maximum allowable reimbursement to health care providers. The active duty people are reimbursed up to 80 percent on dependents care. We feel that 100 percent reimbursement for active duty dependents should be available to them.

They would like to see eye and ear examinations for all categories of beneficiaries and to continue after age 65 CHAMPUS benefits not covered under medicare.

They also asked that I relate to this committee their thoughts on the GI bill. They said we need this as soon as possible if we seriously intend to retain an All-Volunteer Force.

PAY HIKE

Last but not least is of course the pay. As I think the chairman is very well aware, both the committee in the House and I understand the subcommittee on the Senate side has opted to go for a

14.3-percent increase in pay on October 1 in lieu of the pay increase partially on July 1 and then 9.1 percent on October 1. They would like to see the 5.3-percent increase in July and that would be across the board for all hands.

They feel that since the newspapers particularly have played that up in the field to the troops, we want to keep the good morale going that we have got going for us right now because of the good feeling with Congress and what Congress is doing for the military, they feel that Congress should stand by 5.3 percent increase in July.

Then on October 1 to relieve the pay compression that exists for the NCO grades and petty officer grades. I guess the Chairman is fairly well attuned to that. Whereas it used to be prior to the All-Volunteer Force your top enlisted member received about six times as much as the private, that has been turned around that he receives less than four times as much as the private.

This is part of the problem we are having out in the field. These are the things they wanted me to bring to you. I am bringing them to you, Mr. Chairman, for your consideration.

I thank you again for the opportunity and I stand prepared to answer any questions.

[The prepared statement of Mr. McKinney follows:]

PREPARED STATEMENT OF C. A. (MACK) MCKINNEY

Sergeant Major, U.S. Marine Corps (Ret.)
Sr. Vice President, Government Affairs
Non Commissioned Officers Association of the USA (NCOA)

Mr. Chairman. I am C.A. "Mack" McKinney, Sr. Vice President, Government Affairs, for the Non Commissioned Officers Association of the United States of America (NCOA). I retired from the U.S. Marine Corps as a Sergeant Major following 30 years of service, including World War II, the Korean conflict and Vietnam duty. I have been in the people business for 38 years, almost 10 with the NCOA as its principal representative on Capitol Hill.

NCOA is a quasi-military and veterans organization with a membership in excess of 250,000 noncommissioned and petty officers of the armed forces. More than 83 percent are on active duty serving in the Army, Navy, Marine Corps, Air Force and Coast Guard. This fact alone makes NCOA the most unique association of its kind. It is the only privately-operated military organization representing enlisted men and women from all the armed forces before the Congress of the United States.

INTRODUCTION

NCOA is the only organization appearing annually before the House and Senate Committees on Armed Services and (Defense) Appropriations in behalf of all enlisted military personnel, active as well as retired, reserve and national guard. It is the organization that warned Congress as far back as 1975 that the military was experiencing serious problems with the All Volunteer Force. It cautioned the nation's legislators not to terminate the G.I. Bill, not to cut-back on military pay and benefits, not to force dramatic changes in the military services for the sake of economy or social demands and not to give an impression to military personnel that Congress did not care one way or another for their well-being.

It was not until 1980 that NCOA began to see some result from its concerted efforts. It occured shortly after association spokesmen went before the President's Advisory Committee on Federal Pay in 1979 — a most unusual move for a quasi-military organization. Nevertheless, the appearance was rewarded with a report from that panel urging President Carter to take early action on compensation for military personnel. Further appeals by NCOA to the Senate and The White House, coupled with a sudden awareness by others of shortages of skilled military manpower in the NCO and officer grades, caused Congress to act to increase the pay and allowances of military personnel.

Other signs of awareness came to light. The Army readopted unit cohesion, a program NCOA had said will help revitalize morale and discipline particularly among combat-support troops. Better compensation and personal attention were given to hard-pressed recruiters. More money was provided for Navy men assigned to sea duty for longer tours and to submariners whose incentive pay was stuck at an archaic level. More importantly, Congress began talking about a new G.I. Bill — the one program NCOA had been pushing on Capitol Hill in one form or another since the old G.I. Bill's demise. The association even developed its own proposal in order to get one before the Congress. Now it is a subject under consideration during the First Session of the 97th Congress.

MILITARY MANPOWER FY 1982

For Fiscal Year 1982 the Reagan Administration seeks sufficient military personnel and civilian employees to man more than:

1,000 land-based Intercontinental Ballistic Missile (ICBBs),
544 Fleet Ballistic Missile Launchers,
500-plus Naval Surface Ships,
55 tactical air wings,
28 combat divisions,
25 bomber squadrons,
10 air national guard squadrons,
6 fighter interceptor squadrons,
— and numerous operational and administrative support elements and units in the U.S. defense establishment.

To accomplish this monumental task, the Defense Department seeks strengths of 2,119,900 active duty military personnel, 928,900 selected reserves and national guardsmen and 1,024,900 civilians.

The numbers reflect increases of 44,500 in active duty personnel above the FY 1981 supplemental request, 40,700 in reserves and guardsmen and 11,000 civilian employees.

A look at today's All Volunteer Force (AVF) finds it not much different than that of FY 1976. In that year, the military establishment asked for an end-strength of 2,100,000 active members — 19,900 less than for FY 1982. Yet, the number was never attained. There was no real incentive to entice America's youth to commit themselves to a term of service in the armed forces. There is little if any today.

After 1975, the only factor contributing to the attainment of recruiting goals was — and continues to be — the civilian job market. When it is tight, recruiting is good. But even then, there is always a question of quality and mix. In spite of glowing success stories that the Services are "achieving overall active force manning goals," the mental, education and motivation levels are not what they should be.

Neither is the quantity — regardless of earlier reports from Defense. According to figures offered by former Defense Secretary Harold Brown, the Services have never been more than 1.5 percent below authorized strength levels. However, if one pulls back the cover, a different story appears. Because recruiting goals were rarely attained by all the Services, Defense consistently reduced annual requests for military manpower. In some cases, the Services lowered their own strength figures to more closely relate to actual input numbers.

In a related example, a perusal of recent (May 5,1981) figures released by Defense on recruiting reflect an overall 101 percent attainment of enlisted accession goals for FY 1981 thru March 1981. To Defense this is good news, particularly when the percentage is compared to 99 percent in FY '80 for the same period. What is not good news is the actual numbers. In FY '80 the number of accessions was 179,100 but only 165,600 for FY '81 — a shortfall of 13,500. What is more damaging is the shortfall in Army accessions — some 19,200 between FY '80 and FY '81.

FY 1975 was the last year the armed forces had an active end strength of more than 2,100,000. It was in the subsequent FY that the wartime G.I. Bill was terminated for new recruits. During the final month of eligibility, Dec. 1975, the Services scored their greatest recruiting successes in peacetime history. Almost all of the enlistees came in the military to take advantage of VA education benefits.

Since then the effect of past congressional actions have caught up with the military establishment. Compensation and benefits for service members have been reduced, eroded or terminated. To make matters worse the President placed pay caps on increases in basic pay and allowances.

Additionally, there were ever-present threats of more adverse actions. One of the principal issues under attack was the military retirement system — the most valuable benefit of all to career service members. It was battered about by Congress, Defense and the media. Coupled with low pay and other complaints of long hours, poor leadership, less discipline, and etc., senior noncommissioned and petty officers and mid-level commissioned officers decided to bail out. Some of the older ones left as soon as they qualified for retired pay— their departure timed to occur while the current retirement system was intact.

The exodus of NCOs and mid-level officers was not apparent until it was too late. Of the Services, the Navy sounded the first alarm. It found insufficient numbers of qualified and skilled petty officers to sail the ships. The Army came next following a charge by Senator John Warner of the *Senate Armed Services Committee* that it was 48,000 NCOs short in the combat units. Next came the Marines and Air Force, both experiencing shortages but none as great as their other comrades-in-arms.

In defense of the Services, most if not all were aware of the impending disaster. They remained silent because their civilian bosses demanded they support the then Administration's appearance of success. However, the Non Commissioned Officers Association of the USA (NCOA) was not tied to that allegiance. As a private, non-profit organization of noncommissioned and petty officers of the armed forces, NCOA for years warned Congress that it was going to have to face shortages in military personnel recruiting and retention.

For the remainder of FY 1981 and for FY 1982 predictions of better things to come are part of the Administration's new package of people incentives. A pay increase of 5.3 percent in July 1981 and 9.1 percent in October 1981 may bring service-member's purchasing power in line with what it was in 1972.

Congress, through the initiative of this distinguished panel, should approve these pay hikes and not the one recommended by the Committee on Armed Services. There is a new spirit out there among the men and women of the armed forces, a new morale, a new pride, and a feeling that Congress now cares. However, they are cautious.

The recent steps taken by the Congress to correct the input of less-educated youths into the military establishment and to halt the massive exodus of NCOs and petty officers will be for naught if it plays turnabout. It cannot give in one hand and take in the other — not with the same group. What has been promised to military personnel to recruit and retain them in the armed forces must be honored.

Each time the Administration, Congress or a public entity of one type or another proposes, considers or amends legislation that threatens the pay or benefits of a component of the uniformed services, the military becomes concerned and worried. It also reacts. For example, the continual threat of change to the military retirement system has done more to cause many senior enlisted personnel to leave the services than any other threat or action taken by Congress.

More will have to be done for both the active and reserve components. Service in the military is neither a romantic adventure nor a desireable occupation. If it was, the armed forces would have no problem in recruiting manpower.

Military pay must be returned to its purchasing level of 1972. A new G.I. Bill for peacetime volunteers must be adopted. Equitable payments must be made to all who face equal risks or hazards. Laws must be amended whenever needed to provide equal application to both officers and enlisted personnel.

Additionally, Congress must appropriate adequate funds and demand changes to certain policies that will correct many of the social and economic ills in the military that have adversely affected the retention of many skilled and qualified noncommisioned and petty officers; i.e. — compression of pay differentials; reduced training periods; a single club for the use of all enlisted personnel regardless of grade; centralized housing and billeting policies, full forfeiture of quarters allowance to live in substandard housing, compensation awards to lower grade personnel, and the loss of the G.I. Bill — to name but a few.

One can feel the tension of waiting for the other shoe to drop. If it isn't dropped — that is, in doing exactly what has been promised, a new exodus of skilled and experienced NCOs and petty officers will commence again.

In this vein of thought, NCOA opposes the Administration's proposals that will reduce cost-of-living adjustments to military retired pay from semi-annually to once a year and, perhaps, change the method of calculating the Consumer Price Index (CPI); and that which will reduce the amount of salary received by federal employees who are in receipt of military reserve pay while on active duty for training, for the following reasons:

a. CPI Adjustments. The basic argument to reduce the adjustments is that only retired federal workers and military personnel have such an entitlement. Adjustments should be the same as for social security recipients. However, federal employees and servicemembers were promised the twice-yearly adjustments, social security recipients only once a year. Earning the entitlement to military retired pay is far remote from the requirement placed on participants in the social security system. The minimum years for eligibility to draw military retired pay — and the restrictions and requirements imposed on the recipient to continue to earn that pay — are nowhere in the same ball park with those of the social security program.

b. Reducing CPI Calculation. Proponents insist that housing costs should not be figured in the CPI calculations. This, particularly, is out of tune with the lifestyle of the military retiree. It is upon retirement that most purchase their first house or a subsequent one that will become their permanent home.

c. Reducing Salaries of Federal Employees who are Reservists. There is an acute shortage of reservists in the Army Reserve and Army National Guard. Since Congress if offering bonuses to young people to enlist or remain in the reserve forces, it is ludicrous to reduce the earnings of others and believe they will continue in the selected ready reserve. At this time, the military can ill afford to lose their services.

NCOA appreciates the problem facing the Congress in its consideration of these proposals. But, again, the Association urges the Nation's lawmakers to think before they leap. What has been done recently for the good of the services may be again turned easily in the other direction if further erosion is permitted in current benefits available to military personnel.

Senator RUDMAN. I am advised that what you are talking about this morning, particularly reporting from the chiefs of enlisted personnel, are items which are in fact under active consideration by the committee.

Mr. MCKINNEY. Very good.

Senator RUDMAN. We appreciate your testimony.

Mr. MCKINNEY. I appreciate having the opportunity to appear.

Senator RUDMAN. The next witness will be Mr. C. E. Meyers, Jr., president of Aerocounsel, Inc.

Mr. Myers, if you have a prepared statement it will be incorporated in the record. If you will within the time constraints that we unfortunately had to set this morning keep your testimony within that time I would appreciate it.

AEROCOUNSEL, INC.

STATEMENT OF CHARLES E. MYERS, JR., ENGINEER, WRITER, TEST PILOT AND MILITARY ANALYST, PRESIDENT AEROCOUNSEL, INC.

Mr. MYERS. Thank you, sir.

I anticipated a time problem. I created a brief version I would like only to read a portion of that and then explain to you the best I can the issue as I see it.

The value of the *Iowa* class battleship and value of battleships in general has been a most controversial issue.

Senator RUDMAN. Could I interrupt you. Can you tell me about yourself and the Aerocounsel, Inc.?

Mr. MYERS. Yes. I am an engineer, writer, and test pilot and military analyst. I have been a combat pilot in both the U.S. Air Force in World War II and naval aviator in Korea. Following that I was a test pilot. I kind of progressed into all areas of military analysis. I have spent about 20 years in this area. During the last Republican administration I served as the Director for Air Warfare under Dr. Schlesinger. I had responsibility for all fighter and tac aviation. It is a strange background for a guy who is now excited about *Iowa* class battleships.

Senator RUDMAN. We are glad to have your testimony. I just wanted to find out who you were.

Mr. MYERS. I have a private consulting business now. In general I think my interest in this subject came about because of my experience as a tactical pilot.

We have been habitually programed to attack targets that often are not terribly vulnerable, sometimes of relative minor importance, always heavily defended. There was a lot of that going on in North Vietnam. I kind of go into that in my statement. Often there are better solutions.

After leaving the Department of Defense I embarked on a self-initiated study to attempt to understand the value of naval forces because frankly I have had a lot of trouble in that subject in the 4 years in my work. The results of that work I published in a white paper in 1978. I have since become deeply engaged in a discussion of the value and possible architectural changes of our naval forces. I think these first two paragraphs are an important summary of my findings.

FORCIBLE ENTRY INTO FOREIGN COUNTRIES FROM SEA

Forcible entry from the sea into a foreign country is a very difficult, hazardous and demanding military venture. Factors favoring the defender, such as the territorial imperative, intimate knowledge of the terrain and support from the local citizenry can offset force concentrations and technological advantages enjoyed by invaders.

To execute forcible entry from the sea and sustain an outpost in a foreign country defended by modern forces dictates extra resources far beyond those required for land border penetrations. A capability to perform forcible entry is desirable because it serves as an undeniable basis for intimidation of political adversaries.

Transoceanic delivery of military forces, off-shore loiter, graduated insertion of troops and heavy fire support for land combat along coastal regions is a primary responsibility of the Department of the Navy (DON).

I am very careful about how I say that. The Department of the Navy composed of the Navy and Marine Corps.

The DON (Navy/Marine Corps) once possessed the combination equipments to prosecute forcible entry with comfortable margins for success. The Active Force lacks the heavy naval fire support capability which was a key element of success in past ventures. The goal of my presentation is to explain the need to fill this void and to elaborate on why the *Iowa* class battleship is the only cost-effective, near-term solution to our problem.

A full appreciation of the military problems of offshore intervention which takes the form of forcible entry can be gained by a review of the Allied insertion of forces at Salerno, Italy on September 9, 1943.

In Salerno we went into a country that capitulated the day prior to the invasion. The force was composed of 500 ships and landing craft. I think of that in terms of our total fleet today. Of those 500 ships there were 5 aircraft carriers, 12 battleships, 9 cruisers, 40 destroyers, several dozen mine sweepers. On top of that we had 3,100 land-based fighters and tac and bomber airplanes flying out of Sicily to support this operation.

Our combat forces included 169,000 United States and British troops and we were going against the remnants of 4 German divisions of about 30,000 men with 100 tanks. Not a terribly big force.

In brief what happened was that we made a number of mistakes and that is not unusual and not unexpected. The enemy took full advantage of that. On the fourth day they counterattacked and drove a salient to within one-half mile of the beach. The situation was so grave that General Clark sent a message to Admiral Cunningham to prepare to retrieve the force and asked for heavy firepower on the battlefield. You recall the consequences of such a failure because waiting in the wings was Operation Overlord.

If we had failed there we were really going to be in trouble. Cunningham assembled all his navy ships with heavy firepower and literally blew the Germans off the battlefield.

I think it is summarized by historian and former British Army Major, Hugh Pond, in the book, "Salerno". He says:

> One thing upon which nearly everybody agrees is that it was the Navy which made final victory in this operation possible. The incessant and overpowering weight of naval shells harried and smashed the German forces wherever they formed for attack, and without the battleships, (operation) Avalanche would have been turned into another Dunkerque. This is made plain in all personal accounts and all histories written by both sides.

It was hoped that modern aircraft systems would eventually demonstrate a capability to provide adequate support for forcible entry. For various reasons, however, including continued development and proliferation of air defenses and the high cost/vulnerability of sophisticated aircraft, projected tactical air forces can hardly be considered capable of sustaining the volume of accurate fire required to support an invasion or withdrawal against modern forces.

QUALITY OF FIRE SUPPORT

The quality of fire support is a function of accuracy, reaction time, sustainability and insensitivity to night and weather; tactical air does not score high in this regard. TACAIR should no more be considered a replacement for naval gunfire than it would be for artillery in land based operations. Air may supplement but cannot replace artillery or naval gunfire in support of land combat operations particularly when there is a need to paralyze enemy maneuvers on or near the battlefield

Navy concern with the threat from land based air reflects a correct sense of vulnerability of deployed naval ships. Active naval ships of the world, including Soviet ships, have a low tolerance to "hits" by high explosive ordnance. Straffing can be devastating to most ships.

Hits taken by bombs, missiles, and major caliber guns are often disastrous. Other naval forces of the world are more vulnerable than those of the United States because they lack the protective shield of carrier-based fighter/interceptors which are capable of warding off flights of marauding tactical aircraft.

The potential for flights of unsophisticated tactical fighters and attack aircraft to penetrate ship defenses is high. No target is so enticing to a pilot as a ship, regardless of its defenses, the defenses always attrit the other guy. Pilots, habitually programed to attack heavily defended land targets which seldom yield instand feedback, find antishipping missions exhilarating, particularly for those who close to point blank range. The payoff—instant feedback—is often spectacular and rewarding.

Pilots can be counted upon to press the attack when defending against foreign invaders; ships will be damaged in spite of defenses. It is also conceivable that dedicated pilots defending their borders will, in the heat of battle, decide to fly into a ship—it has happened. Consideration of these possibilities causes one to reflect on the ability of our ships to continue fighting or stay afloat after such attacks.

IOWA-CLASS ARMOR

Now the point is that no ship in the world exhibits the armor and system redundancy of an *Iowa* class battleship. One thing I learned during my studies is that you cannot generalize about battleships. We built some models to illustrate that. I have a picture here. *This is all the same scale. The top model is the Soviet* Kiev. From top to bottom is the U.S.S. *Alabama, North Carolina,* and *Iowa.*

I have found that even experienced naval officers are surprised at those differences. They are remarkable. That hull shape gives you some clues about why these ships are so efficient, why they have the range and speed. They happen to be the fastest rough water ships in the world.

However, even an *Iowa* cannot tolerate being mauled for long periods by air. Our sea based air network composed of carriers and surface missile ships although not impenetrable can insure protection from long and repeated attacks. It is relevant that no battleship has ever been sunk by either surface or air action if it had air cover. That is interesting.

Also, no U.S. battleship was ever sunk in combat with the enemy at sea. I am trying to dispell some of the myths I have heard in dialog between the Department of Defense and the Congress over the last year and one-half. In this regard the operational history of the German *Bismark* is worth reviewing. Although eventually sunk the required action absorbed the entire British Atlantic naval force for days. A single battleship roaming the Atlantic was an intolerable threat to their sea line of communications. Imagine the threat of four *Iowa* class battleships in modern form with modern weapons. Although not invincible, it provides a stalwart base from which to propose an operational concept.

There are no ships in the active naval force which can provide adequate firepower to support amphibious operations or can remain operable after being straffed by enemy fighters.

I think for those who might become interested in this subject, an interesting bit to read is chapter 6, first three pages of the book on the attack against our ship *Liberty* during the Six-Day War when the bridge was turned into a disaster zone within seconds. Officers were being literally butchered and it really was a very bad scene. What was causing that devastation?

The ship was being straffed by two Mirages, two fighter airplanes which leads to the point about the *Iowa*. The control area in the *Iowa*, the bridge area, is surrounded by 17 inches of steel. There is no other ship in the world that comes close to that. The most to expect out of our older cruisers, which in themselves are quite tough, would be three or four inches. The potential contribution of an *Iowa* battleship in support of land combat in coastal regions may be appreciated by reviewing the decade of struggle by our forces to interdict North Vietnam's logistics route. This is something I was close to because I was observing all our efforts.

Over the years the determined effort to destroy the Than Hua Bridge cost us some 50 aircraft and many valuable pilots. Eighty percent of the targets of interest were within range of the 16-inch guns of the *New Jersey* which could have destroyed the bridge in less than one hour. Surgical destruction of the Hai Phong Harbor facilities would have been a piece of cake for the 16-inch batteries. Unfortunately we were not permitted to apply a naval solution to the problem, the reason being that the President put a constraint on strikes on the North. Nobody went north, ships or airplanes.

ARTICLE FROM "ARMED FORCES JOURNAL"

In 1969, the U.S.S. *New Jersey* was again mothballed. Later in April 1972 the Communists launched the Easter offensive. Reporting on the scene was writer Col. Robert D. Heinl of the North American Newspaper Alliance who reported in the Armed Forces Journal as follows:

> It is a pity Defense Secretary Laird, Navy Secretary Chafee and several admirals (notably including ex-Chief of Naval Operations D. L. Mcdonald) who blackballed the battleship *New Jersey* into premature retirement or stubbornly roadblocked its activation, weren't sitting along the DMZ last week when the weather was so bad that our air power was either grounded or blinded.
>
> In those grim first days of the communist Easter offensive, all the U.S. firepower along the DMZ amounted to a pickup assortment of sandlot fire-support ships from a U.S. Navy which (unlike the Russians) turned its back on the gun as a modern weapon, and shovelled the *New Jersey* into mothballs because battleships don't set well with the Navy's notion of professional image.
>
> The situation—during the first five days grave, critical, desperate, were some of the adjectives that correctly described it—was a classic one for naval gunfire.
>
> Major enemy units in massed formation, columns of armor, trucks, supplies, were streaming southward along a coastal plain, flanks wide open to warships offshore, hardly an American plane flying—and what was the Seventh Fleet able to produce?
>
> Not much.
>
> The puny gunfire-support force (maybe detachment is a better word: "force" might be misleading) amounted (and still amounts) to one ancient 1943-model light cruiser stripped of three-fourths of her original 40-year old 6-inch guns; and 5 assorted destroyers, mostly World War II vintage, mounting 5-inch guns dating from the mid-1930's.
>
> The total broadside (weight of fire) of the above ships—which in the crunch proved unable, despite valiant efforts, even to stop Russian-model amphibious light tanks from crossing the Cua Viet river under their guns—amounts in aggregate to less than one ton, 1,455 pounds to be fairly exact.
>
> The longest range gun in the Navy had (and has) on the DMZ was aboard one modern destroyer—the 5-inch 54 caliber gun that fires a 75-pound shell over 12 miles.
>
> In contrast with the foregoing feeble capabilities, the *New Jersey's* comparable broadside—primarily nine mighty 16-inch guns, largest in the world—amounts to a little over nine tons (18,300 pounds). With those same big guns, the battleship can throw a shell that weighs more than a Volkswagen complete with accessories, over 23 miles.
>
> Put in other terms, our one battleship (which Messrs. Laird, Chafee and their subaltern admirals hastily deployed home from Vietnam in 1969 to the mothball fleet at Bremerton, Wash.) would have had about 13 times the firepower and double the range of the sad little aggregation of ships the Navy was able to scrape up in this direct emergency of the war.
>
> It is axiomatic that even battleships need the air cover afforded by the all-weather interceptors and fighters of the carrier. It is just as true that neither sea- nor land-based tactical air can perform fire support and air defense suppression more effectively than battleship derivatives. The CVN/*Iowa* team will present a new dimension in the potential for forcible entry and sea control.
>
> The acquisition related questions of cost and availability complement the combat potential of the battleship derivatives. An early infusion of fire support capability can be realized by the immediate reactivation of the U.S.S. *New Jersey* for the Navy estimated cost of $326 million.

COST ESTIMATES

The Chairman mentioned earlier this morning and I have listened to all the dialog between DOD and Congress. I know that that is a terrible problem because that estimate that came over was a class F estimate. In one sense that has been cared for in that I have seen the letter that the Secretary of the Navy sent to the Congress, which in my view from my own experience in the Pentagon constitutes the most precise cost estimate anyone has ever made in that he said it will be done for $326 milion.

I wish we had more cost estimates like that. Now when the first cost estimate for the *New Jersey* evolved as inflation took its toll, my reaction to their cost estimate was yes, class F and it is rough tub, it is too high. We ought to be able to do it for less. I still stand by that. I just feel that the dialog between it, that it will cost more, could encourage people to make it cost more.

In summary, I felt that, properly managed, the derivative form of the *Iowa* battleship can yield the hardware element necessary to demonstrate the naval capability which would be unique in the world and extremely valuable in countering Soviet pressure exerted through surrogate countries. Finally it is clear that a Department of the Navy properly equipped to execute forcible entry can handle the sea control mission as a byproduct. The inverse does not hold true.

That is one of the most important findings of my study. If you create a naval force that can handle forcible entry you have one that can handle sea control as a fallout. If you concentrate on sea control you will end up with a flimsy force of fragile ships that can't stand the combat associated with forcible entry. Relative to the voting and discussion that has gone on in the past, I saw some inconsistencies in that many Members of Congress who have supported over the years funding for amphibious forces and development of new equipment for amphibious forces, failed to support battleships. To me that was an inconsistency because you cannot perform forcible entry without firepower. It does little good to arrange to get all these combat troops face to face with the enemy and have us fail in our effort.

There is an absolute void. Mr. Chairman, I thank you.

Senator RUDMAN. Thank you very much. We appreciate your statement.

[The prepared statement of Mr. Myers follows:]

PREPARED STATEMENT OF CHARLES E. MYERS, JR.

Mr. Myers is an engineer, writer, test pilot and military analyst with 20 years of experience working in the Washington defense arena. His military experience includes Air Force pilot training, a combat tour in the Fifth Air Force in World War II, Navy pilot training and a combat tour as a carrier fighter pilot during the Korean War after which he became an experimental test pilot and served as President of the Society of Experimental Test Pilots.

Since 1961, he has worked in the area of military requirements analysis and weapon concept development. From October 1973 to November 1977, he served as Director of Air Warfare in the office of the Secretary of Defense. During his tenure, he played a key role in developing the Air Combat Fighter and originated the program to exploit "stealth" technology for combat aircraft. In 1978, Mr. Myers returned to his previous position as president of Aerocounsel, Inc., a private consulting business. During the past three years, he has engaged in extensive study of the Value and Architecture of Naval Forces for Conventional War. His recent work addresses the Value and Combat Utility of Iowa Class Battleships.

A DISCUSSION OF THE VALUE OF REACTIVATION OF IOWA CLASS BATTLESHIPS

C. E. Myers, Jr.

Forcible entry from the sea into a foreign country is a very difficult, hazardous and demanding military venture. Factors favoring the defender, such as the territorial imperative, intimate knowledge of the terrain and support from the local citizenry can offset force concentrations and technological advantages enjoyed by invaders. To execute forcible entry from the sea and sustain an outpost in a foreign country defended by modern forces dictates extra resources far beyond those required for land border penetrations. A capability to perform forcible entry is desirable because it serves as an undeniable basis for intimidation of political adversaries.

Transoceanic delivery of military forces, off-shore loiter, graduated insertion of troops and heavy fire support for land combat along coastal regions is a primary responsibility of the Department of the Navy (DON). The DON (Navy/Marine Corps) once possessed the combination equipments to prosecute forcible entry with comfortable margins for success. The active force lacks the heavy naval fire support capability which was a key element of success in past ventures. The goal of my presentation is to explain the need to fill this void and to elaborate on why the IOWA class battleship is the only cost-effective, near term solution to our problem.

A full appreciation of the military problem of offshore intervention which takes the form of forcible entry can be gained by a review of the Allied insertion of forces at Salerno, Italy on 9 September 1943.

The Allied force was composed of over 500 ships of which there were 5 carriers, 12 battleships, 9 cruisers, 40 destroyers, several dozen mine sweepers and 3100 land based aircraft supporting a combat force of 169,000 US/UK troops. The enemy force was 30,000-plus German troops made up of the remnants of four divisions, part of which was mechanized and equipped with 100 tanks. The invaders managed to establish a foothold but proceeded to make more than the usual number of errors of which the enemy took full advantage. In brief, by the fourth day, the Allies were in serious difficulty which was compounded by an aggressive armored counter attack that established a German salient within one-half mile of the beach. The situation appeared grave, as evidenced by the message General Clark sent to Admiral Cunningham on 14 September announcing preparation for removal of the force in the southern sector and requesting heavy fire support on enemy positions. Admiral Cunningham responded by concentrating his sea based artillery on the German salient and the approaches to the battlefields.

Historian and former British Army Major, Hugh Pond, in his book, "Salerno" summarizes as follows:

"One thing upon which nearly everybody agrees is that it was the Navy which made final victory in this operation possible. The incessant and overpowering weight of naval shells harried and smashed the German forces wherever they formed for attack, and without the battleships, (operation) Avalanche would have been turned into another Dunkirk. This is made plain in all personal accounts and all histories written by both sides."

It was hoped that modern aircraft systems would eventually demonstrate a capability to provide adequate support for forcible entry. For various reasons, however, including continued development and proliferation of air defenses and the high cost/vulnerability of sophisticated aircraft, projected tactical air forces can hardly be considered capable of sustaining the volume of accurate fire required to support an invasion or withdrawal against modern forces. The quality of fire support is a function of accuracy, reaction time, sustainability and insensitivity to night and weather; tactical air does not score high in this regard.[1] TACAIR should no more be considered a replacement for naval gunfire than it would be for artillery in land based operations. Air may supplement but cannot replace artillery or naval gunfire in support of land combat operations particularly when there is a need to paralyze enemy maneuvers on or near the battlefield.

Navy concern with the threat from land based air reflects a correct sense of vulnerability of deployed naval ships. Active naval ships of the world, including Soviet ships, have a low tolerance to "hits" by high explosive ordnance. Straffing can be devastating to most ships. Hits taken by bombs, missiles and major calibre guns are often disasterous. Other naval forces of the world are more vulnerable than those of the United States because they lack the protective shield of carrier based fighter/interceptors which are capable of warding off flights of marauding tactical aircraft.

The potential for flights of unsophisticated tactical fighters and attack aircraft to penetrate ship defenses is high. No target is so enticing to a pilot as a ship, regardless of its defenses (the defenses always attrit the other guy). Pilots, habitually programmed to attack heavily defended land targets which seldom yield instant feedback, find anti-shipping missions exhilarating, particularly for those who close to point blank range. The payoff (instant feedback) is often spectacular and rewarding. Pilots can be counted upon to press the attack when defending against foreign invaders; ships will be damaged in spite of defenses. It is also conceivable that dedicated

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1. The Defense Science Board Summer Study of 1976, "Counterforce Against a PACT Attack" (S)

pilots defending their borders will, in the heat of battle, decide to fly into a ship -- it has happened. Consideration of these possibilities causes one to reflect on the ability of our ships to continue fighting or stay afloat after such attacks. An impressive demonstration of the damage potential of fighter aircraft was the attack by Israeli Mirages against the USS Liberty (Six-Day War).[2] The weapons that devastated our ship on the first pass were 30mm Defa guns and unguided rockets, a level of weaponry available around the world.

A Navy/Marine team, equipped and trained for incursion missions would be valuable for dealing with widely scattered threats to world stability. The architecture of a seabourne incursion force (possibly an enhanced Amphibious Ready Group) will vary as a function of the problem but must include:

- Sea based protective air cover.
- Logistics ships.
- Sea to land transfer systems.
- Firepower base.
- Staging base for land combat forces.

A combination firepower and staging base should be constructed so that it can remain operable even after being hit by enemy delivered ordnance. It should afford a survivable haven for combat troops during insertion and provide a readily available medical facility near the action. The staging base could also serve as an on-the-scene command center until control can be transferred to the objective area. Such a ship is missing from the inventory

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2. See Assault On The Liberty, Chapter 6.

of the active U.S. Navy. Increased numbers of other ships cannot make up for this critical deficiency. The IOWA class battleship, in some derivative form, is the most immediate and least costly interim solution to providing the missing element.

The contribution of an IOWA battleship in support of land combat may be appreciated by reviewing the decade of struggle of our air forces to interdict North Vietnam. Over the years, the determined effort to destroy the Than Hoa Bridge cost the U.S. some fifty aircraft and many valuable pilots. It, along with eighty percent of the targets of interest, was within range of the USS New Jersey which could have doubtless destroyed the bridge in less than one hour. Surgical destruction in Hai Phong Harbor facilities would have been a "piece of cake" for the 16-inch batteries. Unfortunately, we were not permitted to apply this naval solution to the problem.

In 1969, the USS New Jersey was again mothballed. Later, in April 1972, the Communists launched an Easter offensive. Reporting on the scene was writer Col. Robert D. Heinl, Jr. of the North American Newspaper Alliance who reported in the Armed Forces Journal as follows:

> "It is a pity Defense Secretary Laird, Navy Secretary Chafee and several admirals (notably including ex-Chief of Naval Operations D.L. McDonald) who blackballed the battleship New Jersey into premature retirement or stubbornly roadblocked its activation weren't sitting along the DMZ last week when the weather was so bad that our air power was either grounded or blinded.
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> In those grim first days of the communist Easter offensive, all the U.S. firepower we had along the DMZ amounted to a pickup assortment of sandlot fire-support ships from a U.S. Navy which (unlike the Russians) turned its back on the gun as a modern weapon, and shovelled the New Jersey into mothballs because battleships don't sit well with the Navy's notion of professional image.
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> The situation--during the first five days grave, critical, desperate, were some of the adjectives that correctly described it--was a classic one for Naval gunfire.
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an American airplane flying--and what was the Seventh Fleet able to produce?

Not much.

The puny gunfire-support force (maybe detachment is a better word: "force" might be misleading) amounted (and still amounts) to one ancient 1943-model light cruiser stripped of three-fourths of her 12 original 40-year old 6-inch guns; and five assorted destroyers, mostly World War II vintage, mounting 5-inch guns dating from the mid-1930's.

The total broadside (weight of fire) of the above ships -- which in the crunch proved unable, despite valiant efforts, even to stop Russian-model amphibious light tanks from crossing the Cua Viet river under their guns -- amounts in aggregate to less than one ton, 1,455 pounds to be fairly exact.

The longest range gun the Navy had (and has) on the DMZ was aboard one modern destroyer -- the 5-inch 54 caliber gun that fires a 75-pound shell over 12 miles.

In contrast with the foregoing feeble capabilities, the New Jersey's comparable broadside -- primarily nine mighty 16-inch guns, largest in the world -- amounts to a little over nine tons (18,300 pounds). With those same big guns, the battleship can throw a shell that weighs more than a Volkswagen complete with accessories, over 23 miles.

Put in other terms, our one battleship (which Messrs. Laird, Chafee and their subaltern admirals hastily deployed home from Vietnam in 1969 to the mothball fleet at Bremerton, Washington) would have had about 13 times the firepower and double the range of the sad little aggregation of ships the Navy was able to scrape up in this direst emergency of the war.

To modernize and activate the New Jersey (as well as to accuratize its fire-control system for the pinpoint bombardment shooting we so badly needed last week and this one, too) cost $21 million.

For $21 million, you have just about the price of ten B-52 strikes, or of six downed Phantoms, not including the added cost and agony of 12 more hostage American POWs assuming anyone walks away from the crashes.

In terms of operating costs, it would have cost the Navy 20-25 percent more money to keep the New Jersey on the active list than it does to operate the USS Oklahoma City, the one cruiser (with three pitiful 6-inch guns) now off the DMZ.

The Oklahoma City's total broadside is 425 pounds, part of which can reach about 11 miles. For 25 percent more, we could have had the New Jersey (18,300 pounds, 23 miles range), which at this juncture of events might seem to have been a considerably better bargain.

In 1967, when the late Sen. Richard Russel and other members of Congress forced former Defense Secretary McNamara and an aviation-dominated Navy hierarchy into bringing back the New Jersey from mothballs, it lay within the Navy's power to more than double the range of the battleship's 16-inch guns.

For the cost of two shot-down Phantoms, the Navy could have pushed a development (since proven with brilliant success for the 8-inch guns of the cruiser St. Paul) that would have enabled the New Jersey to shoot its big guns all the way to Laos.

That this still secret (though simple and inexpensive) development was not quickly and energetically applied to the

New Jersey reflected the die-hard resistance of carrier-minded admirals who abominated the efficient, cost-effective old battleship as a symbolic put down to their costly way of warfare.

Wouldn't it make sound military -- let alone money -- sense to reactivate the already modernized and paid-for New Jersey and keep her with the Seventh Fleet until every American is out of Vietnam and Hanoi has finally learned that she cannot smash her way into the south?"

By Col. Robert D. Heinl, Jr.
North American Newspaper Alliance
Armed Forces Journal, May, 1972

The collateral sea battle potential of the IOWAs is impressive. Each one can provide firepower in two forms: (1) 16-inch guns which outrange the STYX missile and (2) vertically launched Tomahowks/Harpoons in numbers which exceed the missile compliment of any Soviet ships! Additionally, they can absorb at least an order of magnitude more hits from known ordnance than any Soviet ship. The combat control space on the bridge is surrounded by steel 17-inches thick. The internal side armor above the water line is 12-inches thick and the armor around the barbettes is 11-inches thick. Relative to crew safety, the IOWA class casualties from WorldWar II, Korea and Vietnam was a total of seven men!.

No ship in the world exhibits the armor and systems redundancy of an IOWA, however, even an IOWA cannot tolerate being mauled for long periods. Carrier based air and accompanying air defense ships can assure protection from prolonged attack. It is relevant to note that no battleship of any nation was sunk by aircraft or ships while being provided air cover. Also, no U.S. battleship has ever been sunk at sea while engaging in combat. In this regard the operational history of the German Bismark is worth reviewing. Although eventually sunk, the required action absorbed the entire British Atlantic naval force for days. That single battleship roaming the Atlantic was an intolerable threat to their SLOC. Imagine the threat of four IOWA derivatives with modern weapons! Although not invincible, they provide a stalwart base from which to propose an operational concept.

It is axiomatic that even battleships need the air cover afforded by the all-weather interceptors and fighters of the carrier. It is just as true that neither sea or land based tactical air can perform fire support and air defense suppression more effectively than battleship derivatives. The CVN/IOWA team will present a new dimension in the potential for forcible entry and sea control.

The acquisition related questions of cost and availability complement the combat potential of the battleship derivatives. An early infusion of fire support capability can be realized by the immediate reactivation of the USS New Jersey for the Navy estimated cost of $326M. It would augment our capability until the other three IOWAS could be modified and deployed (3 to 4 years).

Properly managed, the derivative form of the IOWAS can yield the hardware elements necessary to demonstrate a military capability which would be unique in the world and extremely valuable in countering Soviet pressure exerted through surrogate countries. Finally, it is clear that a Department of the Navy designed for forcible entry can handle the sea control mission as a by-product; the inverse does not hold true.

SEA BASED FIRE SUPPORT

TYPICAL BOMBARDMENT RATES AVAILABLE

SHIP	DISPLACEMENT	CREW	TONS/HOUR	TONS/HR/PERS
VIRGINIA	10,000	442	77	.1732
SPRUANCE	7,810	296	77	.2586
SHERMAN	3,960	292	115	.3933
COONTZ	5,907	377	38	.1015
DES MOINES	20,950	1803	949	.5261
NIMITZ	91,487	6600	18 (Alfa) 27 (Cyclic)	.00265 .00404
IOWA	58,000	1500	1458 *	.972

* Nine 16-inch guns at 2 rounds/min.

Reserve Officers Association of the United States

STATEMENT OF MAJ. GEN. J. MILNOR ROBERTS, AUS (RET.), EXECUTIVE DIRECTOR, RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

Senator **Rudman**. Maj. Gen. J. Milnor Roberts, AUS (Ret.), executive director, Reserve Officers Association of the United States.

General **Roberts**. Mr. Chairman, I am pleased to be here. I noted with some concern I am No. 13 on the list.

In the interest of time I would ask that my statement be inserted in the record. I will try to hit just a few highlights so that we all move out of here in relatively short order.

First of all it needs to be said over an over gain that the Defense Department, which gets 30 percent of its total force in the Reserve components, put barely 5 percent of the budget into Reserve components in direct expenditures. Therefore we believe that the Congress as in past years might well consider upgrading certain of these funds for the obvious reason that if the Army gets over half of its combat strength from the Reserve for 5 cents on the dollar, what could they do for 6 cents on the dollar? That is an overall statement. I think that we should keep that in mind.

ARMY RESERVE

With regard to the Army Reserve, in the next several years the Reserve is going to be reorganized to tailor itself for more contingencies such as the Rapid Deployment Force. You may not be aware that today's Rapid Deployment Force of 85 Army Reserve units as well as other Reserve component units from the Guard, the Air and the Navy, could not operate without this. We askd that $7 million be appropriated in 1982 to prepare for expansion of this type of unit for the future, which is a modest sum indeed.

We also fully support the administration's request for strength of the Army Reserve in the 1982 budget. We do believe that they might consider a modification of their plan for full-time manning which could be increased a little bit over what they have proposed. But they ask for 2,089 Reserve personnel who are on active duty for full-time support of the program and 770 Active Force people as well. One thing that concerns us recently about the Army Reserve is that the quality of the personnel going in has been dropping.

We think that the USAREC people should be advised to take a more careful look at the quality of some of the people going in the Army Reserve. The number of category IV people has been increasing disproportionately. There is a suggestion that some of the effort of USAREC has been diverted from their mission in support of Army Reserves. So we think that we ought to take a little look.

NAVAL RESERVE

I believe previous witnesses have covered it but I would like to reiterate that we fully support a program of 97,000 end strength for the Navy Reserves at the end of 1982 despite the fact that presently the strength is 87,000. Last year the Congress appropriated money for 92,000 and the Navy did not use it. Now they are talking about going to 92,000 at the end of 1982. We don't believe this is sufficient because their studies show them that they need 112,000.

We believe that every effort should be made and funding should be provided to go to 97,000 by the end of fiscal year 1982. Again on the personnel side of the Navy, the Navy has shortchanged its individual training program for many years. Right now they are about to do it again. The Air Force and the Army are fairly generous in their support of individual training and this can be extremely useful and valuable to the service.

I just came back from the Pentagon where I made an award to the Air Force intelligence chief for using Air Force Reserve personnel in intelligence production on an individual training basis which produces hard intelligence for the Air Force. They are using these people right and they are paying them appropriately. The Navy has not been doing this. We think the Navy needs to do it. We also are concerned that they may take $10 million away from Naval Reserve funding to use in direct support of the fleet using Reserve personnel but stealing the money from the budget of the Naval Reserve.

This would impact adversely on anything they are doing with individual training funds. We believe the $10 million ought to come from some other source, not from Naval Reserve funding which is sparse enough as it is. This has been contained in a report of the House Appropriations Committee by the way.

On equipment there has been a reasonable proposal made, which we support to begin to repair the naval transport problem in the Air Force, the Air Reserve of the Navy, by purchasing 12 used C-9 airplanes from the airlines in lieu of brandnew C-9B's. As a stopgap we would support this. I think the total cost is somewhere around $77 million which is one-third of what it would cost if we bought new ones.

This is only part of the solution. We believe that this committee should support some funding for brandnew C-9B's because if we don't do it then the manufacturer will shut down his production line and there will be no more that will be made available without huge startup costs. So in the past we have been getting one or two new C-9B's. We suggest in addition to the used ones which are airline planes that we authorize as many as six C-9B's for production for the Navy.

Also for the Naval Reserve air end we recommend this Congress fund modernization of 36 P-3 aircraft for fiscal year 1982 at a cost of $50.4 million which is an increase over the administration's request. They have to be modernized or they can't function very well with the rest of the fleet. About a third of the Navy's capability is in the Reserve. Therefore, these airplanes must be modified to be useful as they are programed to be.

We also believe that two new PC-3 patrol aircraft should be purchased for the Naval Reserve. If this happens it will be the first time in the history of the Navy that brandnew equipment will have gone directly to the Reserve and we think is about time. The Air Force has already set this pattern and we think the Navy ought to emulate it.

COAST GUARD

With regard to the Coast Guard we have submitted for the record an article by Mr. Vincent Thomas with regard to the problems of the Coast Guard. The Coast Guard is being asked to do all kinds of things without any more money or very little more money and they can't do it and we support increased funding for the Coast Guard as outlined in this article.

We also support increased funding for the Coast Guard Reserve and their Selected Reserve program, and an addition of 1,200 spaces. The House, I believe, has already acted on 700 or 800 of these. We would hope the Senate would go to 1,200 and will prevail.

MARINE CORPS RESERVE

The Marine Corps Reserve has the same problem as other services with antiquated equipment. Their strength is in good shape. We do believe equipment should be given some attention in the Marines.

AIR FORCE RESERVE

With regard to the Air Force Reserve, we feel that their record has been exemplary in the past year. On page 29 of my statement we show where they have been used in emergencies with high effectiveness and not too many people know they are being used every day for support of the Active Forces. We support the purchase of 16 H models for the Air Force Reserve and 6 for the National Guard. We also support a modification program for C-130's which will permit them to continue to perform some missions now being served by C-123 aircraft. The funding is not terribly large for this.

In conclusion, Mr. Chairman, last year this Congress approved increased funding for medical personnel and we, I must say, did a lot of work along this line but they neglected the Reserve. This time the Department of Defense is proposing legislation which would permit some liberalization of payment to medical specialists within the Reserve Forces because in the event of emergency they are going to be needed and needed quickly.

That concludes my remarks.

[The prepared statement of General Roberts follows:]

PREPARED STATEMENT OF MAJ. GEN. J. MILNOR ROBERTS, AUS (RET)

EXECUTIVE DIRECTOR

RESERVE OFFICERS ASSOCIATION OF THE UNITED STATES

Mr. Chairman and Members of the Committee:

It is a pleasure to have the opportunity to appear before this Committee for a presentation of the views of the Reserve Officers Association on the financial requirements of the Reserve Forces of the United States. We applaud the proposals of the Reagan Administration which will provide the resources for a strengthened national defense, and we salute the initiative of the Congress and members of this Committee for their actions in 1980 which improved the Defense Base from which further progress must be made.

The economic climate of the United States today demands that the most cost effective means be employed to improve our defense posture. As we have stressed in prior years, properly supported Reserve Forces should have very high priority in achieving this objective. A few examples will illustrate this point.

1. Of the Armed Forces available in a major national emergency, about 30 percent of the Total Force would be Reserve Components. Yet, the Defense Department allocates barely five percent of its budget to the Reserve in direct expenditures.

2. Reserve Components have achieved or exceeded their authorized strengths at this time, and the quality of their accessions in recent years has been very favorable in comparison with Active Forces although recent trends in the Army Reserve have been less favorable qualitatively. However, required strength levels in the Army and Naval Reserves have not been achieved.

3. Units of the Reserve Components have demonstrated their high level of performance in repeated instances, and they are performing important missions on a daily basis.

4. A more representative cross-section of American citi-

sens are now represented in the Reserve Components which are located in some 4,000 armories and reserve centers throughout the Country. These Citizen-Soldiers, Sailors, Marines, and Airmen provide an excellent and increasingly important bridge between the general public and the Total Force.

5. Any question about the efficiency of properly trained and supported Reserve Forces should be dispelled by the example of the Israelis. Over 75 percent of their Force is Reserve, and their ability to fight and win has been demonstrated at least three times.

Under these circumstances, we believe that the authorized strength of the several Components be increased in FY 1982 as will be outlined by individual Service later in this statement.

We also urge the Congress to provide the means to better equip the Reserves in terms of modernization and correcting serious shortages, especially in the Army. Army Reserve units, for example, have only about one-third of the equipment required on mobilization expressed in dollar value. It is not surprising that some units have low Readiness Ratings due to equipment shortfalls.

Having mentioned the favorable aspects of Reserve personnel strength in units, we must refer now to the most serious deficiency and that is the alarming state of the Army Individual Ready Reserve. While various figures are given by different sources, we believe the requirement for the Army IRR is around 700,000 officers and enlisted personnel. Presently there are about 210,000 in this category, and it is doubtful if more than 80 percent of them could be contacted in an emergency in view of a lack of correct addresses. Furthermore, soldiers with the most needed skills are the least available.

Despite the employment of various stratagems by the Defense Department to strengthen the IRR in the past several years (which have failed), it is now obvious that there is only one way to solve this problem and that is with conscription. For this reamen. ROA firmly supports Mr. Montgomery's Bill, H.R. 1500, which would classify young men and then permit the draft of up to 200,000 per year from the IRR of the Army. The lottery system would be used, and the soldiers would be required to spend only 4 1/2 months on active duty for Basic and Advanced Individual Training. Subsequently, they would not be required to serve in units, but they could volunteer to do so. They would remain in the IRR for 7 1/2 years.

ROA also supports enactment of a new G.I. Education Bill and related educational incentives that would improve the quality and retention of military personnel. Any such programs must include benefits for members of Reserve Components as well as active duty personnel. With regard to the G.I. Bill, we feel that provisions should be incorporated into the legislation to enable personnel to take a one-year sabbatical from their (active) military service in order to devote full time to their academic pursuit. Not only would this serve as an incentive for people to remain on active duty, but such a provision would improve the qualifications of service members.

On the other hand, we oppose the popular notion of making one's earned educational assistance transferable to a service member's dependents. The cost of such a benefit would potentially become astronomical beginning five to ten years downstream. Such a "blank check" cannot be justified! Furthermore, transferability itself would effectively undermine the G.I. Bill program because it would tell some people that the Federal Government will provide them with educational assistance in exchange for mititary service. But other individuals who are eligible to serve and earn these benefits would be told that they can also have the sameeducational assistance but they don't have to earn it since one of their parents served in the military. Such a gross inequity could only be counter-productive in the long term.

There are two other legislative items related to the G.I. Bill that we feel are important and should be fully supported by this committee. One would be to extend the termination date of the present G.I. Bill beyond 1989. The other item would forgive certain civilian educational loans in return for military service; Senator Chafee introduced S. 665 to accomplish this.

In the last session of Congress, an attempt was made to change the present policy of military leave for Federal employees who participate in the Reserve. If that effort had succeeded, we are convinced that the entire program would have been severely damaged since employers in the private sector would have interpreted this action as a lessening of support by the U. S. Government for the Reserve. This has been challenged again this year, and we urge you to sustain the present system. If the Military Leave policy is altered as proposed by the House Post Office and Civil Service Committee, the loss of trained personnel which would ensue would cost far more in terms of re-training and reduced readiness than the "savings" which would result.

We also strongly advocate adoption of S. 614, introduced by Sen. Thurmond, which would create the position of Assistant Secretary of Defense for Reserve Affairs. We believe the elevation of this position from the present Deputy Assistant level to a senior member of the Defense Secretariat concerned with Reserve Forces and Mobilization would be a stimulus for increased attention to the Reserves and their enhanced readiness.

Mr. Chairman, I would now like to offer more detailed recommendations by Service.

ARMY RESERVE

The Army Reserve is such an integral part of the Total Army that today's active force would be incapable of performing its war time missions without an immediate mobilization of the Reserves. In the Army's tactical support increment the Army Reserve units constitute 33 percent of the whole. Over 80 Army Reserve units are included in the newly formed rapid deployment force, again highlighting the importance of our Reserve Forces. As the Army modernizes to accommodate new weapon systems and reflect new doctrine, so must our civilian components. It is anticipated that over the next five year period there will be approximately 300 new units activated in the Reserve. These will be primarily combat support and combat service support units. It is anticipated that $7.0 million will be required in FY 1982 to start the implementation of the modernization structure.

The strength of the Selected Reserve Units continue to be one of our major problems. From a low of 185,000 in FY 1978 they have increased to 205,650 by FY 1980; hopefully they will reach approximately 236,600 in FY 1981. This is an encouraging trend but still a long way from the wartime requirement of 295,000 or even a peacetime authorization of 267,800. We sincerely hope that Congress, in its wisdom, will provide sufficient incentives to enable an acceleration of the strength in the Selected Reserves to an approximate 242,200 by 1982 and enough momentum to reach the peacetime authorized 267,300 in the new four years.

During the past two years the enlistment and reenlistment bonuses available to the high priority units in the Army Reserve have proven very successful. At the present time approximately 33 percent of the Army Reserve Forces are authroized these bonuses. We would like to see this program expanded to cover at least 50 percent of the Selected Reserve units by both the enlistment and reenlistment incentives.

During the period November 1978 through July 1980, units that offered both enlistment and reenlistment incentives for membership increased in strength 13.1 percent. Units that offered only the enlistment bonus have increased 8.2 percent, while units that did not have these incentives available gained only 4.6 percent. In June 1980 additional high priority units were added to the list of units eligible to receive incentives.

Another factor that contributed to the increase in strength has been the apparent success of the partnership between the U.S. Army Recruiting Command and the Army Reserve units. We do however, register a concern about this partnership that the Army Reserve should not receive more than its proportional share of category "IV" personnel. This is something that must be constantly monitored as the personnel requirements for tactical and general support units require quality over quanity. "CAT IV" accessions have increased from 726 or 5.6 percent in FY 1976 to 4,296 or 16.6 percent in FY 1980.

Individual Ready Reserve (IRR)

The IRR which consists of those soldiers required upon mobilization to bring active and reserve components to wartime strength and serve as initial replacements for combat losses has dropped from a strength of approximately one million in 1972 to a little over 200,000 in 1981. Even if all members of the IRR were available upon mobilization and in the proper MOS's the shortage is astronomical.

In Fiscal Year 1981 a program was funded to provide bonuses of $600 to individuals with selected MOS's to reenlist for a minimum of three years in the IRR. We understand that this program is not meeting the success that was anticipated. It is our contention that nothing short of a modified draft to the IRR will bring it to any formable strength.

Unit Readiness

Unit Readiness is the key to the successful accomplishment of the Reserve missions upon mobilization. The assignment of full-time military to key positions in the Army Reserve units has the greatest possibility for improving Unit Readiness. Of all the Reserve Components the Army Reserve has had the lowest percentage of full time personnel support their units. This is a deficiency that should be rectified as soon as possible.

In addition to military technicians, the FY 1982 budget provides for an end strength of 2,089 Army Reserve personnel and 770 Active Component personnel assigned to support higher priority Army Reserve units. Qualified full time personnel will be assigned in areas that are most critical to unit readiness such as training, supply management, maintenance and administration.

Unit Readiness can only be accomplished through outstanding training programs. In FY 1980 the Army Reserve participated in quite a few joint exercises. This is the type of training where the Reserves and the Active Forces work together on a single mission. It developes a confidence in each other's ability. We think that one of the best training programs is the overseas deployment training where the Reserve Units receive realistic training with those units they would be supporting upon mobilization and in those areas where they would likely to be committed to combat. In FY 1980, elements of 55 Reserve Units participated in this form of overseas training and in FY 1982 it is anticipated that elements of 100 units will be able to have this valuable training. This type of training should be made available to at least one third of those Army Reserve units earmarked for overseas deployment each year.

ROA wishes to compliment the Army, particularly, the United States Army Field Forces Command, for its instigation of CAPSTONE: a program that will improve the Unit Readiness of selected reserve high priority combat and combat support units. Under this program every unit in the Army Reserve is being aligned with units in the Active or Reserve Components with which it is likely to be deployed in wartime. We sincerely hope this expansion is being considered in the near future and that it will include a wartime mission for the ARCOM Headquarters.

Equipment

An extremely important factor to the training and unit readiness of the Army Reserve units is the amount and type of equipment available. If the approximate 80 units that are earmarked for the Rapid Deployment Forces are to perform their missions upon mobilization they will need to have on hand that modern equipment necessary for their immediate deployment. In FY 1980 it was reported that the Army Reserve had approximately 56 percent of the peacetime dollar value authorized. Currently, the additional issues of equipment to the Army Reserve is not keeping pace with the increases in requirements, authorizations, and withdrawls for prepositioning material overseas (POMCUS). Any additional diversion to the POMCUS Program will make the equipment status even more critical. Of the 3.7 billion dollar value of equipment required today, the Army Reserve has on hand approximately 1.4 billion dollars.

As the Active Army modernizes and developes new doctrine a similar modernization and doctrine change should be accomplished for those early deployment units of the Reserve Components.

In additon to the necessary equipment for training, equipment for an effective mobilization is also needed. One of the major shortages of equipment is in the electronics and communication field. For an example, 106 Army Reserve units are authorized some type of ADP of which only five to date have computers for their use.

Facilities

Of the 1,053 Army Reserve Centers owned or leased by the Army, only 40 percent are considered adequate. The program for replacement of inadequate or expansion of existing facilities to meet space requirements should be a continuing process.

NAVAL RESERVE

All things considered, the Naval Reserve had a relatively good year in 1980 and appears to be making slow but steady progress in most areas. Some problem areas still remain, which I will discuss later.

The Reserve Officers Association notes with pleasure that this Administration's FY 1982 Budget request for the Naval Reserve includes two items that ROA had strongly supported in our testimony during previous years, but which were not included in those budget requests: (1) retention of the four ASW and two HAL Helicopter Squadrons, and (2) placement of all Selected Reserve officers in Category "A" (48 paid drills).

Two disturbing items have occurred in the manpower area during the execution of the FY 1981 Budget which should be brought to the attention of the Congress. The FY 1981 Defense Appropriation Act included funds to support a Selected Naval Reserve strength of 92,000 -- an increase of 5,000 over the Carter Administration request of 87,000. Despite this Congressional direction, the Department of Defense has directed the Navy not to exceed 87,000, an action directly contravening the intent of Congress. The Defense Department rationale is that such recommended Naval Reserve Strength increases are being justified by the Navy Manpower Mobilization System (NAMMOS), a system not yet approved by OSD. Even though NAMMOS methodology has been fully approved at all levels within the Navy Department and no major faults have been found by OSD, neither approval nor disapproval has been forthcoming. By holding the decision in abeyance, OSD then cites lack of approval as justification for their decision. The kindest description of such logic is that it is totally circuitous. To stay within the OSD imposed ceiling, the Chief of Naval Reserve has been required to implement stringent recruiting controls which are preventing the accession of personnel who are qualified to meet documented requirements. For some inexplicable reason, no action has yet been taken in this matter even though ROA and other organizations have been calling attention to the problem since January. It is now quite late in the Fiscal Year and the longer the 87,000 arbitrary "ceiling" is retained, the more difficult it will be to attain the Congressionally mandated Naval Reserve strength for FY 1981. The Reserve Officers Association strongly recommends that OSD be directed immediately to rescind the 87,000 Naval Reserve strength ceiling and that the additional appropriated funds to grow to 92,000 in 1981 be utilized as intended by the Congress.

The other item of concern in the personnel area concerns current OSD procedures in accounting for Selected Reserve manpower. Over unanimous service opposition, OSD has commenced incorporating full-time support personnel (TARS) and Individual Mobilization Augmentees (IMA) into the Selected Reserve numbers. The logic in not clear but appears partly to result from a program decision to move Category "D" personnel of all Reserve components to the Selected Reserve authorization as part of an expanded IMA program. Such action not only confuses all concerned by using existing terms for new definitions, but also artifically inflates Selected Reserve strength numbers, thereby giving an erroneous impression of growth. Additionally, such action appears to be clearly in violation of 10 USC 268 and 270 which specifically define the Selected Reserve and direct participation in at least 48 scheduled drills and 14 days of ACDUTRA each year. ROA strongly recommends that OSD be directed to comply with the appropriate sections of statute in their definitions of Reserve categories.

Turning now to the FY 1982 authorization, I want to return to the Selected Naval Reserve strength issue. The FY 1981 "impoundment" action by OSD discussed earlier is directly reflected in the Reagan Administration's request for FY 1982. Again, the requirements identified by NAMMOS are ignored and the FY 1982 request is for a Naval Reserve strength of 87,000. Such consistency is a significant improvement over the consistency of the attempts to reduce the Naval Reserve to 52,000 exhibited by OSD for so many years. However, the FY 1982 budget request still ignores very real and proven requirements. The Vice Chief of Naval Operations recently stated that the NAMMOS identified FY 1982 Selected Reserve requirements are approximately 112,000. In accordance with this requirement, ROA had every intention of unequivocally requesting a Selected Naval Reserve strength of 97,000 for FY 1982, an increase of 5,000 over the FY 1981 funded strength of 92,000. ROA strongly supports such a strength increase for FY 1982 as an essential step towards fulfilling documented mobilization requirements. Since these requirements will obviously continue upwards as the size of the active Navy is increased, we now must move boldly towards increasing the strength of the Selected Naval Reserve. However, attainability of 97,000 has been thrown into question by the OSD action noted earlier. We are eight months into FY 1981 and the Naval Reserve is still "holding" at 87,000. The longer this ceiling is in effect, the more difficult attainment of 97,000 by the end of FY 1982 becomes. Accordingly, ROA strongly recommends that $31.2 million in additional funding be appropriated to support a FY 1982 Selected Naval Reserve man-year average of 97,000; however, with the caveat that this number may need to be adjusted downward to a more reasonably attainable figure if the aforementioned OSD direction is not rescinded.

Mr. Chairman, you no doubt are aware that the Naval Reserve has approximately 1500 enlisted and 5000 officers drilling in a non-pay status. These personnel are meeting 90 percent drill requirements and most are in non-pay units which are working alongside similar Selected Reserve Units, performing the same mission. These people are almost totally ignored in the FY 1982 Budget request and, for that matter, have been similarly ignored for years. In the early seventies, 2,900 of these personnel were authorized training duty annually. By 1976 that number was greatly reduced. The FY 1982 Budget request provides training duty for 351 persons in this category. In view of the fact that thousands of non-drilling IRR personnel from various Reserve components are authorized annual training duty with pay, ROA considers it unconscionable that over 6,000 Naval Reservists possessing valid mobilization assignments cannot perform training duty with pay even though they are attending at least 90 percent of all scheduled drills without pay. Accordingly, ROA strongly recommends that $12 million be appropriated so that these Naval Reservists may perform annual training duty with pay.

In their report on the 1982 Department of Defense Authorization, the House Armed Services Committee noted the severity of Navy's personnel difficulties and strongly urged that reserve units be used to provide short term assistance in the form of direct support for fleet activities. The Reserve Officers Association applauds this initiative and strongly encourages similar direction as a part of the 1982 Defense Appropriations Bill. However, ROA takes issue with the aspect of this HASC recommendation which directs the Navy to identify $10 million to support the program. Such funding is properly identified to the Reserve Personnel Navy (RPN) appropriation, an appropriation which, for the past few years, has not been sufficient to support the existing needs of our Naval Reservists. Each year, essential training is cancelled or postponed because RPN funds are inadequate to provide necessary transportation. Thousands of Naval Reservists drilling in non-pay status cannot perform annual active duty training because of insufficient RPN funds, a problem discussed earlier in this statement. To require that an additional $10 million be taken "out of hide" from the RPN appropriation will exacerbate an already unsatisfactory situation. Identification of this amount from other than the RPN appropriation will eventually require Congressional reprogramming approval. The extended bureaucratic process involved in such action is well known to all and would undoubtedly result in the non-implementation of a very worth-while, cost-effective, morale building program. Accordingly, the Reserve Officers Association strongly recommends that the $10 million noted in the HAC report be provided as additional funding to the 1982 RPN appropriation and identified for use in direct fleet support efforts.

In the area of hardware the most critical immediate need, which has been addressed repeatedly over the past few years, is the maintenance of an organic Navy tactical airlift capability. Old C118 aircraft are being phased out with no replacement other than sporadic C9B "buys" in minimal numbers. 13 C9B aircraft are now operational; two were authorized and funded for FY 1980, but were deleted as a result of FY 1980 Supplemental and Recission action. Six were authorized for FY 1981; but only two were funded -- in essence the same two deleted for FY 1980. None have been included in the President's FY 1981 Budget Request.

House and Senate Authorization action apparently precludes procurement of new C9B aircraft in FY 1982. Both the HASC and SASC recommend procurement of used, "airline excess", C9s (12 by SASC, 6 by HASC) but authorize no new procurement. In testimony before the Armed Services Committees, ROA strongly supported the purchase of the used C9s as a stop-gap effort to replace unprogrammed C-118 losses. However, we just as strongly urged that such procurement not be viewed as an easy alternative to new procurement. The service life of the used C9s is limited at best; however, they would provide an excellent transition without loss of capability as new C9B aircraft are being phased in over the next few years. ROA strongly supports the used C9 procurement initiative but deplores the expedient of such procurement to the exclusion of the essential new procurement. Accordingly, ROA urges support of the Senate action recommending procurement of 12 used C9s in FY 1982 which together with site support and spare parts requires $71.2 million in additional funding. However, such recommendation in no way diminishes ROA's belief that six new C9B aircraft should be procured in FY 1982 and that Congressional intention should be shown by directing procurement of six C9B aircraft in each of the Fiscal Years through FY 1985. Such action is particularly necessary in view of the fact that the manufacturer no longer produces this version of the C9 for civilian use. Without a demonstrated intention to continue such purchases of C9B aircraft for the Navy, production line realities will dictate significantly higher unit costs.

As a corollary, it is essential that the industrial base be capable of meeting the increased procurement inherent with mobilization. To this end, stability of multi-year procurement must become the norm, rather than the "yo-yo, roller-coaster" situation which has been created in the production lines by the type of single year procurement practiced over the past several years.

The program to modernize the ASW capability of Naval Reserve land based patrol aircraft was provided significant momentum by the Congress in the FY 1981 Budget. This program, involving installation of a Tactical Navigation Modernization kit (TACNAVMOD) in P3-A/B aircraft, received no funds in FY 1980. However, in FY 1981 the Congress recognized the need to accomplish such modernization rapidly so that Naval Reserve ASW aircraft would be combat ready in the event of mobilization. Accordingly, Congressional action provided for installation of TACNAVMOD in 34 Aircraft, a significant increase over the 22 requested in the FY 1981 budget. The FY 1982 Budget Request again ignores the need to accelerate this modernization and requests only 15 such kits. It is absolutely essential that the momentum provided by the 96th Congress be maintained so that these Naval Reserve aircraft will possess the necessary mission capability upon mobilization. This is particularly true since an entire year of this vital program was lost as a result of the FY 1980 budget action. Accordingly, the Reserve Officers Association applauds the actions of the Senate and House Armed Services Committees which authorized 36 TACNAVMOD kits for FY 1982. We strongly recommend that the Congress fund the modernization of 36 P-3 A/B aircraft for FY 1982 at a cost of $50.4 million, an increase of $30.3 million over the Administration budget request.

General Conti, Chairman of the Reserve Forces Policy Board, during Congressional testimony, addressed the need to upgrade and modernize Reserve equipment. This is such an important area that additional comments are in order. While this problem encompasses the entire spectrum of Reserve equipment, it is particularly critical in the Naval Reserve Carrier Air Wings. The capability of these Air Wings is unquestioned and has been constantly demonstrated. However, they are flying rapidly aging aircraft and the compatability gap between these aircraft and those flown in the fleet grows wider at an alarming rate. This is particularly significant because the aircraft carriers to which these Air Wings would mobilize are becoming increasingly more specialized in their intermediate maintenance systems. Accordingly, there would be neither spare parts nor test-bench equipment on board to supoort the newly arrived Reserve aircraft. Greater compatability between Reserve and Fleet aircraft must be achieved. It is recognized that such modernization is expensive and cannot be attained overnight. However, the necessity for the commencement of a modernization program is obvious. New production aircraft are being received in the Air National Guard and the Air Force Reserve. The Naval Air Reserve can afford no less.

In this light, therefore, the Reserve Officers Association enthusiastically supports the initiative of the Senate Armed Services Committee which recommended procurement of two new P-3C ASW Patrol Aircraft for the Naval Reserve. If this procurement takes place, it will mark the first time that new combat aircraft have ever been added to the Naval Reserve inventory. Since no such recommendation was included in the House FY 1982 Authorization report, the fate of this initiative is obviously uncertain at this time. However, ROA strongly believes that this is a step albeit a small one, in the right direction. Accordingly, we strongly recommend that funding in the amount of $46 million be added to the 1982 Defense Appropriation to support this procurement.

The current Navy practice of "hand-me-down" equipment for the Naval Reserve may have been effective at one time; but continuation of this practice is driving the Naval Air Reserve, in particular, to ineffective obsolescense. ROA strongly recommends initiation of a program which will eventually result in new procurement of identical equipment for both active and Reserve components. Not only would mobilization readiness be significantly enhanced, the incraased cost effectiveness of such procurement action would also result in long term cost savings. The larger "buys" would reduce unit costs appreciably; additionally, training and related overhead costs would be greatly reduced as a result of aircraft transitions occurring simultaneously in Reserve and active forces.

USCG HEADS INTO SHOAL WATERS

BY VINCENT C. THOMAS, JR.

"WE'VE got the refugee problem. We've got the fisheries problem. Now, we've got the drug problem. . . . The Coast Guard was at Vietnam and everything else. We crossed the Rhine, courtesy of the Coast Guard, in World War II."

The speaker was Senator Ernest F. Hollings (D-S.C.). The occasion was the confirmation hearing for Andrew Lewis, the new Secretary of Transportation. The subject was the U.S. Coast Guard. Hollings minced no words on the matter, pointing out to Lewis that the USCG is "the largest entity in your whole jurisdiction" as well as "the most neglected. . . . I think it ought to be operated, updated, and up-financed. . . . This is one segment of our government that's been underfinanced for the last 10 years."

If anything, Hollings, for years one of the Coast Guard's strongest supporters in Congress, understated the case, as a "zero-based" personnel study completed late last year would indicate. Members of the multi-agency study group—which included representatives of the Transportation Department and of the Office of Management and Budget (OMB)—concluded, among other things, that:

(1) The presently authorized military strength of the [illegible]rd is 'inadequate to sustain the current level of [illegible]ons."

(2) To sustain the aforesaid current level of operations —"without depleting resources"—would require an increase in military strength "of almost 15,000 people."

(3) For the Coast Guard to sustain "an optimal level of operations" would require *nearly double* the USCG's current strength.

Regrettably, the multi-mission service's people problems are compounded and exacerbated by some serious hardware shortages as well. Coast Guard Commandant Admiral John B. Hayes pointed out some of these in a recent "State of the Coast Guard" address:

- The USCG's present "capital plant" consists of 245 cutters, 166 fixed- and rotary-wing aircraft, 2,050 boats, and a shore plant "valued at close to $4 billion." Simply to meet "peacetime mission performance standards," however, the Coast Guard would need 350 cutters and close to 200 aircraft. "This, in effect, would restore the Coast Guard cutter fleet to about pre-1969 levels."

- Much of the present capital plant, moreover, is "overage, obsolete, and/or deteriorated"—factors which "reduce mission performance, adversely affect personnel retention, and degrade the nation's military defense posture."

Hayes also spelled out the effect such long-term shortages and austerities have had, and will continue to have, on Coast Guard performance. "In some mission areas, most notably search and rescue and aids to navigation," he said, "we are performing adequately, albeit not as well as we think we should.

"In other areas, such as enforcement of treaties and commercial vessel safety," he candidly admitted, "our performance leaves something to be desired. . . . There are still far too many violations of the Fisheries Conservation and Management Act. . . . In spite of record seizures in the last three months of 1980, we are stopping less than 20% of the marijuana which is being smuggled into our nation by sea. . . . [And] we are not conducting the inspections which are required by the Outer Continental Shelf Lands Act Amendments of 1978."

Unfortunately for the Coast Guard—and for the American public it serves—the situation will get worse before it can possibly get better. The present backlog in the Coast Guard's AC&I (acquisition, construction, and improvements) account is now over $2 billion. To eliminate that backlog "and make progress toward an acceptable fleet size," Hayes estimates, the AC&I budget should be "on the order of $800 million per year . . . for 10 years." But Congress appropriated only $334 million for AC&I in fiscal year 1981, and the FY 1982 budget request submitted by President Carter would increase the AC&I account to only $375 million—barely enough to keep up with inflation.

The overall USCG budget for the coming fiscal year does not, in fact, keep up with inflation—despite a still increasing workload. Some $2.2 billion is requested in all funding categories, or an increase of $150 million over the USCG's FY 1981 appropriations. Included in that total, however, is a $56 million increase in retired pay, which means the increase for all other major accounts combined—AC&I, operating expenses, alteration of bridges, reserve training, and RDT&E (research, development, test, and evaluation) —comes to less than $100 million.

Whether the Coast Guard will be able to obtain the increase in funding it needs at a time when virtually all other agencies of the government—except for the Department of Defense—are being cut back is questionable. But there is, surprisingly enough, some reason for optimism. More than almost any other department, the Coast Guard can spell out, through considerably detailed "workload data," a number of the benefits, direct and indirect, that accrue to the nation as a whole and to various citizens as individuals for each dollar spent on USCG programs.

The most important such data are in the search and rescue (SAR) account. In fiscal 1980, the Coast Guard responded to 81,380 SAR requests, saved 4,567 lives, prevented the loss of $1,235 million in property, and "otherwise assisted" 178,284 persons. In FY 1982, according to the workload data estimates, there will be 84,924 SAR cases and the Coast Guard will save 4,762 lives, "otherwise assist" 185,628 other persons, and prevent property loss totaling $1,351 million.

When *all* of the USCG's budget accounts are factored into the equation, Hayes says, "a conservative estimate of the total benefits which the nation receives annually" from the $2 billion Coast Guard budget "is on the order of $16 billion."

If that estimate is reasonably close—and the figures are annually scrutinized in detail by Congress and OMB as well as by the Transportation Department itself—it would be difficult to argue with the USCG Commandant's assessment that the return-on-investment ratio "probably makes the Coast Guard the most cost-effective bargain available to the American public today." ∎

Vincent C. Thomas, Jr., is executive director of the Navy League and associate publisher of SEAPOWER

MARINE CORPS RESERVE

The Marine Corps Reserve appears to have been quite well provided for in the FY 1982 Budget request. Items which were to be the subject of ROA testimony were included, mostly as a result of the Reagan amendment. As General Crist testified earlier before this committee, most problem areas have been addressed and corrective action provided for in the Budget request.

ROA would note, however, that the equipment modernization issue mentioned earlier concerning the Naval Reserve is equally applicable to the Marine Corps Reserve. Many Marine Air Reserve squadrons deploy to aircraft carriers upon mobilization. The Marine Reserve aircraft would suffer the same lack of equipment support as would the Naval Reserve aircraft for the same reasons. Here again, we must start moving toward new procurement of identical equipment for both the Reserve and Active Duty Marine Corps.

COAST GUARD RESERVE

In confirmation hearings for Secretary of Transportation Lewis, Senator Hollings pointed out that the Coast Guard has been neglected and underfinanced for the last ten years, saying -- "I think it ought to be operated, updated and up-financed..."

While the material and personnel conditions of the other military services has become well known, the plight of the Coast Guard appears not to be well understood. This is partly because the Coast Guard serves as an agency in the Department of Transportation and partly because the media portrays the Coast Guard as a "can do" service. The public generally is not aware of the antiquated and worn out equipment that has resulted from years of constant public service without replacement. In addition, maintenance funds are inadequate.

In peacetime the Coast Guard is the nation's pre-eminent maritime law enforcement agency. In wartime, it becomes a part of the Navy. Navy planners expect Coast Guard forces to join them in wartime in a high state of readiness. Executive orders direct the Secretary of Transportation to plan and program for this. But, this mission of military readiness has suffered from low priority, and funding has been unavailable. We ask your support to see that such funding authorization is restored and that other readiness problems of the Coast Guard receive careful consideration. I am appending a recent article by Vincent Thomas, Executive Director of the Navy League, which provides an excellent summary of the problems currently facing the Coast Guard. ROA concurs wholeheartedly with the evaluations expressed by Senator Hollings and by Mr. Thomas.

The recently established Navy/Coast Guard Board has recently completed a Joint Wartime Tasking Study, the results of which will most certainly expand several existing Coast Guard taskings and create other new ones. Such results appear most logical; however, this is occuring at a time when the Coast Guard's day-to-day operations and responsibilities have been increased; when the existing capital assets of the Coast Guard are inadequate; and when the fleet is at its lowest operational capability in modern history. Real capital growth must be authorized for the Coast Guard if this most troublesome anomaly is to be corrected.

These new wartime taskings will obviously tax both Regular and Reserve manpower resources. But even discounting these new taskings, the authorized size of the Coast Guard Reserve is a matter of grave concern. The FY 1982 Budget request is for a Selected Reserve strength of 11,700 -- the same level which has been authorized for more than ten years. The Coast Guard Selected Reserve maintained an average end strength of 11,713 in FY 1980. Certainly, the professional and monetary incentives provided by Congress in the past year contributed to this success. However, the perception that the Coast Guard Reserve is fully manned, encouraged by the Selected Reserve on board strength, is, at best, misleading.

A true perspective of the Coast Guard Reserve program must include an understanding of the responsibilities levied upon the Coast Guard Reserve upon mobilization. Coast Guard mobilization requirements are currently stated as 22,000 personnel. (ROA believes that these requirements are understated for existing taskings; they most certainly must be revised upwards if the expanded taskings are implemented.) After the Selected Reserve has been mobilized, 10,300 personnel requirements remain. At best, only 5,000 personnel are projected to respond from the Individual Ready Reserve (IRR). This leaves a shortfall of 5000-6000 to meet current mobilization requirements.

Repeated efforts have been made to incrementally increase the Selected Reserve from the long stagnated 53 percent of the mobilization requirement to a level of 75 percent. ROA has strongly supported these efforts over the past several years. However, all such attempts have been totally unsuccessful.

The FY 1982 Budget request for the other military services would provide the following Selected Reserve strength percentages vis-a-vis Selected Reserve mobilization requirements:

Air Force Reserve - 98%
Marine Corps Reserve - 87%
Naval Reserve - 78%
Army Reserve - 78%

However, again, the FY 1982 Budget request would only fund the Coast Guard Reserve at the aforementioned 53 percent of Selected Reserve mobilization requirements. The discrepancy, compared to the other services, is obvious! This low level simply reflects a continuing lack of appreciation and understanding of the Coast Guard Reserve which, thankfully, has not been the case for the other Reserve Components.

ROA strongly recommends that as a minimum, the Coast Guard Selected Reserve strength be incrementally increased to 75 percent of current stated requirements - 16,500; and that a target date for attainment of this strength be established as 30 September 1985. Accordingly, ROA further recommends that the FY 1982 Coast Guard Selected Reserve average strength be increased by 1200 to a level of 12,900 at an additional cost of approximately $3.7 million.

AIR FORCE RESERVE

Once again we are pleased to report that the Air Force Reserve exceeded its programmed end strength of 58,219 in FY 1980. This represents not only a numerical gain of four percent, but an increase in the quality of the force. The number of high school graduates among the non-prior service enlistments was 89 percent, a two percent gain over FY 1979.

The fourth annual Air Force Reserve readiness exercise, REDOUBT 80, conclusively demonstrated that all Reserve units can be mobilized in 24 hours and deployed within 72 hours. Included in the exercise for the first time was a test of the active force notification and recall procedures for Individual Mobilization Augmentees. The results proved the procedures to be quick, efficient, and cost effective.

With the exception of two fighter units converting to newer aircraft, all Air Force Reserve flying units are combat ready. The secret of continued Reserve effectiveness is modern equipment and realistic training, coupled with meaningful missions.

In FY 1980, crews of the Reserve's 53 flying units saved 61 lives at the Mount St. Helens disaster and 17 during the Las Vegas MGM Hotel fire; flew 70 percent of all hurricane missions in the Gulf of Mexico and Atlantic; airlifted more than 60,000 patients; and flew 78,000 hours in active force

C-141's and C-5's as associate unit members.

To continue its success in maintaining readiness and mission effectiveness, the Air Force Reserve must modernize its equipment. This is the priority requirement for the FY 1982 and succeeding budgets.

Tactical Airlift

Although more than one-third of all tactical airlift is provided by the Air Force Reserve, three squadrons will still be flying piston-powered C-123 and C-7 aircraft at the end of FY82. Not only is the Reserve still partially equipped with piston-powered aircraft, but the majority of the Reserve C-130 squadrons are flying the aging "A" models.

The average age of these C-130A's is over 22 years. Combat, rough field, and high stress operations have taken their toll, resulting in maintainability and reliability concerns now. The C-130A lacks the combat capability of the newer C-130H which offers 26 percent more payload, 52 percent more range, and 11 percent higher cruise speed. There are no C-130H models in the Air Force Reserve airlift units.

During the preceeding fiscal years, the Congress has taken action to modernize tactical airlift by adding C-130H aircraft to the DOD budget for the Air National Guard. There is a compelling need to take similar action in FY 1982 to provide C-130H aircraft for the Air Force Reserve.

With all active force C-130E's and C-130H's required through the 1990's 32 new C-130 aircraft must be procured for the Air Force Reserve to accomplish necessary modernization of its vital tactical airlift fleet. We urge the Congress to amend the proposed FY 1982 Defense Authorization Bill to include 12 C-130H aircraft for the Reserve forces, with six earmarked for the Air Force Reserve.

C-130 Modifications

In the modest Reserve modernization program projected in the FY 1982 budget, the Air Force is scheduled to lose its only aerial spray capability with the phase out of the UC-123K units. In view of the disease problems in the likely areas of conflicts, we recommend that C-130 spray modifications be evaluated as a means of retaining this necessary military capability.

Another operational requirement is the modification of HC-130H rescue aircraft to aerial tankers to permit complete support for refuelable special operations and rescue helicopters. Funding is needed for the purchase of necessary equipment and conversion of Reserve HC-130H's.

A-10 Aircraft

In FY 1982, the Reserve is programmed to activate its third A-10 tactical fighter squadron and gain two additional F-4D squadrons. This modernization is an important enhancement of the total tactical fighter assets of the Air Force. Current programs, however, call for only 18 A-10 aircraft per squadron. ROA supports continuing the A-10 production line in order to complete the modernization program of the Air Reserve Forces units with a full complement of 24 aircraft.

Air Reserve Technicians

Despite our emphasis on equipment modernization, it is a fact that one of the chief factors in maintaining Air Force Reserve readiness is the Air Reserve Technician (ART) program. The high skill level and stability of these dual-status civilian employees and military members of the Reserve is critical to operational readiness.

The Air Force Reserve terminated the test of the militarization of technician positions on June 30, 1980. Test results clearly showed the failure of this approach in the Air Force Reserve organization. During the test only 92 of the 165 Wage Board positions (56 percent) and 50 of the 64 General Schedule positions (78 percent) were filled. Recruiting and retention were impaired because of uncertainty over the future of the technician program, and an insufficient number of skilled maintenance personnel were attracted in a full-time military status.

The Reserve Officers Association urges the Congress to exempt Air Force Reserve Technicians from militarization and to increase its civilian ceiling to accomodate the restoration of the ART positions converted during the test program. Without this relief, some programmed conversions to more modern equipment may be delayed or unit readiness seriously impaired.

Balanced Force Structure

Presently, the Air Force Reserve provides more than 30 percent of all tactical airlift, 48 percent of strategic airlift crews, more than 20 percent of aerospace rescue and recovery, and 40 percent of the maintenance for MAC's C-141's and C-5's. One half of the crews for SAC's new KC-10 tanker/cargo aircraft will be Reservists. While providing this capability, and more, to the Total Force, the Air Force Reserve costs only two percent of the Air Force budget.

In view of the economies associated with the Reserve Forces, and their superb readiness, we recommend that a Balanced Force Structure be maintained as increases are made in the Air Force budget for FY 1982 and future years.

CONCLUSION

In conclusion, I would like to applaud the 96th Congress for the passage of PL 96-284 which established special pay for active duty medical officers. We anticipate that this legislation will contribute significantly to the recruitment and retention of Health Care Professionals and thus elimiate the shortages in this professional Service.

Unfortunately, the new concept of special pays established in PL 96-284 active duty medical officers did not include such health Professionals in the Reserve components where critical shortages also exist. Similar legislation is needed for the Reserve Forces health care personnel to overcome serious shortages in all Services and enhance their mobilization readiness. ROA believes that a special pay incentive program similar to PL 96-284 for the Reserve Components will overcome one of the greatest obstacles in the recruitment and retention of these officers. We understand that the Secretary of Defense has initiated a legislative proposal to provide special pay for Reserve Component medical officers and ROA urges early consideration of this matter by the Committee.

I'd like to emphasize my earlier remarks that we believe that military educational incentive legislation, a new peacetime G.I. bill, is an extremely important measure for both acquisition and retention of military personnel. We request the Committee to express its interest and to give its utmost support to this measure, and urge that it include provisions for both the Active Forces and the Reserve Components. We firmly believe that, since the beneficiary of the incentive is the Department of Defense, the program should be budgeted and justified by the DoD, but because the Veterans Administration has developed an effective management structure in connection with the former GI bills, it should administer the program.

I thank you for the opportunity to appear today. I am prepared to respond to questions you might have.

Senator RUDMAN. Thank you very much, General.

A number of items you have mentioned in your summary are in fact being looked at by the chairman. So I expect you will find some action.

General ROBERTS. I wanted to go through this as fast as I could and get out of here before the clock strikes 12.

Senator RUDMAN. Thank you.

Our final witness this morning is Miss Nellie Gray, president, March for Life.

We have your prepared statement. We are running over by an hour behind this morning.

MARCH FOR LIFE

STATEMENT OF MISS NELLIE J. GRAY, PRESIDENT, MARCH FOR LIFE

Miss GRAY. I am Nellie Gray, president of March for Life. We are a nonprofit, nonpartisan, and nonsectarian organization working to protect the right to life of all human beings born and preborn. We are working to insure the value and dignity of each human being and see abortion as the greatest attack on the right to life of any human being because of the innocence of the child.

HUMANITY OF CHILD

The whole burden of our testimony, of course, is on the factual information about the humanity of the child and much of that has been presented to the Senate recently in other hearings before another committee. We see the humanity of the child as basic to our action on anything that has to do with protecting or killing that innocent prenatal life.

We see the responsibility of the military, of course, as protecting the lives of all human beings, civilian, military, everyone. It certainly includes in the military operations protection of even POW's. It includes protecting civilian communities. It includes protecting people who are refugees from any kind of military area. Certainly that includes protection by the military of innocent human beings, certainly women and children.

Congress is in a position where it cannot afford to compromise the lives of any human beings born or preborn. It is the responsibility of the Congress to provide us with the legislation and the leadership in fact of assuring that the innocent life is protected through all the laws passed by this organization and by our highest body.

Now previous administrations have seen witnesses before the House and Senate Appropriations Committees suggesting that they needed money in the military appropriations bill so that they can assure that in military operations, in hospitals and through CHAMPUS and so forth there can be the authority and the money to kill the innocent children through abortion. The reason for this unfortunately was stated by a high military physician about 1½ years ago, that abortion was needed to keep female personnel on their feet; that is, to reduce the ineffectiveness rate or nonproductive rate of females in the military.

Obviously the right to life people found this highly offensive. It is the kind of thinking that we want to bring to the committee's attention again to assure that the same type of attitude does not prevail in the appropriation bills now being considered.

I have on page 4 of the testimony—I am resubmitting last year's testimony—some detailed figures showing that we can save lives by cutting out the wherewithal to kill the babies in the military hospitals. The unfortunate thing is that they did not go down to zero. I think that is what needs to be done by the military, that the hospitals with some of the highest degree of medical technology can save lives.

We would like to see all the appropriations used by the military be for only the purpose of saving lives. The fact is that the numbers can be reduced by cutting out some appropriation. What we are interested in is the principle involved in saving all of the lives including the mother and the child.

Now in the prepared statement also I provide a text of what we would like to see as a recommendations for the provisions in the bill. It is on page 8 of the prepared statement. What you will see there is what we would like to see all of the public moneys used for, to try to save both the mother and child.

Medical science is bringing us to the point now where we can more and more save both mother and child in any decision. What we do not want to see in the legislation is a preference about whose life shall be saved, which life shall be saved. We want to assure that there are provisions to save as many lives as possible through as much medical technique as we can possibly bring forward. What we are looking for is no funds for killing.

What we are looking for is a statement in the appropriation bill to say that we want the military money to be used to save both mother and child, as many lives as possible, and where they are trying to save the lives of both mother and child, that certainly there will be appropriations available for those medical treatments.

[The prepared statement of Miss Gray follows:]

March for Life

June 17, 1981

Testimony before Senate Subcommittee on Defense Appropriations by Miss Nellie J. Gray

Mr. Chairman and Members of the Subcommittee,

I am resubmitting a copy of my testimony before this subcommittee last year, September 14, 1980, because the issues and the gravity of the abortion abomination in our country continues.

Please assure that no tax dollars are used in any of our military installations to kill innocent preborn children.

Respectfully submitted in Life,

Nellie J Gray

Mr. Chairman and Members of the Committee,

I am Nellie J. Gray, President of *MARCH FOR LIFE, Inc.* of Washington, D.C., a non-profit, non-partisan, and non-sectarian organization with the purpose of assuring that the value and dignity of each human being, born and preborn, shall be protected by the laws of our land.

I come to you today because of our long-standing and deep concern that there is a depreciation of this value and dignity of human beings, even supported by the action of our government through this Administration and this Congress, both of which have the power and authority to reaffirm the inalienable right to life of each human being and then to act to assure that this right is protected as the "paramount" right of each American.

The most prominent visibile sign of callous disregard for the right to life is by abortion in our land today. Thus, this testimony is directed to that issue, which is but the bloody tip of the mentality to reduce human beings to materialistic raw material.

RESOLVE THE ISSUE IN FAVOR OF LIFE, NOW -- NO OTHER WAY

Mr. Chairman, I regret very much that I have to come before this Committee and ask that you stop the federal tax dollars from being used to kill innocent preborn children. You should have known that you never should have started such payments in the first instance. By now, I am sure, you are as tired of this constant struggle with the life and death issue which continues before the Congress. I, too, am very tired and very, very impatient.

However, the abortion issue is not going away until it is resolved in favor of life, so remove abortion once and for all from any legitimate place in any part of the lives of Americans. By a combination of the official efforts of all branches of our government -- Judicial, Legislative and Executive -- an abortion massacre has been going on in America for 8 years -- that's 8 years too many. This Congress can and *must* stop abortions -- both the funding and the abortion acts. Now, get down to serious business of effectively carrying out your responsibilities as elected representatives of the American people, and stop the American holocaust!

HUMANITY OF THE PREBORN CHILD

Abortion remains a hot issue before this Congress because it involves the lives of human beings -- the humanity of the innocent preborn human being as a victim for death and the humanity of the family of that preborn human being -- the child's mother, father, grandparents, and society as a whole.

Abortionists and those skirting the issue of abortion want to erase the humanity of the preborn child and his family from the issue. But, it cannot be done.

THE HUMANITY OF THE PREBORN CHILD *(cont'd)*

Mr. Chairman, before this Committee can consider abortion any more, it must open its eyes, head, heart, and ears to the simple facts of the humanity of the preborn child.

I say it is simple—and I truly mean that.

A unique human being comes into existence when the father's sperm fertilizes the mother's ovum. The genetic code is set, and the preborn human being, in its natural habitat of the mother's womb, grows until birth, and then grows from infancy throughout a natural continuum of life. At no period of that life span is that human being more or less human than at the time of fertilization. Thus, that life and each human life must be protected from the moment of fertilization. [1]

It is because of this humanity of the preborn child, and the abortionists destruction of an innocent human being, that the abortion issue is a hot one. It falls into the category of repeated incidents in history which show, unrelentingly, the fact of man's inhumanity against man. Never were any of these periods in history peaceful periods, but are marked, starkly and unrelentingly, by turmoil as people of good will defended innocent victims who could not defend themselves. There was the period of slavery in our own history, and the period of Jews and the final solution in Germany.

Now, in our times—as if some people cannot learn from history—the killing of preborn children. You are witness to the unrest it causes in our land, and this unrest will continue until the killing stops.

CUT OFF ALL -- THAT MEANS ALL! -- PUBLIC FUNDS FOR ABORTION

Mr. Chairman, I appear before this Committee today to ask that you act in one area in which you can uniquely act. You can stop all—that means all—public funds being used for abortion.

Abortion—killing innocent preborn children—is big business in the United States, much of which is funded by public tax dollars. Abortionists have a special vested interest—a pecuniary interest—in keeping the tax dollars flowing into their pockets.

Mr. Chairman, and Members of this Committee, cut this blood money off! And now!

You do this by beginning with the right premise. Abortion kills preborn human beings; using tax dollars for this purpose gives official approval to this killing; therefore, no tax dollars shall be used for killing preborn children.

You began with the wrong premise in 1977, and you came out with the wrong legislation. Congress began with the equivalent of "No tax dollars shall be used to kill preborn children, *except that* tax dollars can be used to kill preborn children in certain circumstances."

Sad, Mr. Chairman, but, from the beginning of trying to stop tax funds being used for abortions in 1977, there was not the firm purpose to stop all funding. Therefore, it meant that Members of Congress over a six-month period were compromising, negotiating, and downright haggling, over: "Which preborn human beings shall be permitted to live and which shall be permitted to be killed by abortionists and paid for with tax dollars."

This Committee and this Congress can no longer take that position.

CONGRESS CANNOT COMPROMISE THE LIFE OF A PREBORN HUMAN BEING

There is an oft-repeated saying on Capitol Hill that legislation is arrived at through the art of "compromise." Compromise, by definition, means that each side gives up something in order to arrive at a settlement. But, when the subject is the life of a preborn child and part of the life span of many human beings, Congress cannot give up something without giving up life—and that life is not Congress' to give up.

All of the House-Senate compromises in Defense, D. C., and Labor/HEW Appropriations Act were based on the premise that there is something less human and less valuable about the preborn child and it may be disposed of at will. This type of thinking even brought to the floor of the House and the Senate the odious proposition that preborn children should be tested for defects and killed with tax dollars if found to be defective—whatever that meant and by whatever criteria individuals would unilaterally judge whether the child met the standards of being "perfect" for life.

It is imperative that Congress get these "exception clauses" for the "life of the mother" and all other exceptions out of your vocabulary and thinking, and begin to understand and work for the premise that "all reasonable efforts and ordinary means must be used to save either and/or both the mother and her preborn child or children because each of these born and preborn human beings have an equal value of life and an equal right to live and an equal right to be protected by the law of our land.

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[1] See attached pamphlet: *SCIENTISTS FOR LIFE, INC., The Position of Modern Science on the Beginning of Human Life, 1975.*

GOVERNMENT'S ROLE IS TO PROTECT, NOT TO KILL, HUMAN BEINGS

Killing preborn human beings began at the Federal and state levels with tax dollars without any specific authorization from Congress for the use of federal tax dollars for abortions. The abortion business, unannounced, reached into the federal Treasury and got blood money, obviously with the assistance of the Executive Branch and with no resistance from the Congress.

For these, and many more reasons, including the odious nature of killing preborn children, the grass roots prolife people began as early as 1974 to try to stop the use of federal funds for abortions. There was a peak of activities in 1977, when debates on Federal funding of abortions lasted for six months, repeatedly made front page news, and caught the attention of editorials across the country.

As this Committee well knows, the grass roots prolife people throughout the country are not satisfied with the outcome of the D.C., Defense and Labor/HEW Appropriation as it came from this Congress and as it was set forth in HEW regulations.

Congress must now enact specific legislation which clearly provides that no funds are appropriated for performing abortions, including killing preborn children with drugs and devices which are abortifacients. Proposed text of such legislation is included in the last part of this testimony.

This Committee knows that prolife America supports strong, bold, clear, and uncompromising legislation to stop funding of abortions. This Committee knows that prolife America will work to the limit of our personal physical resources to assist the Congress in enacting this legislation.

Congress must also recognize that it is the responsibility of each Member of this Body to enact this legislation with, or without, citizen support. Each Member of Congress is also a citizen, who has a primary responsibility to protect each human being in our land. This responsibility is merely heightened for each Member of Congress because of official nature of being elected to Congress and assuming the responsibility of public trustee, which includes protecting human beings.

PROLIFERS TIRE OF RED HERRINGS!

Abortionists want to continue their lucrative, bloody business and dip generously into the public treasury for dollars. To do this they have resorted to tactics which are nothing but "red herrings," and which are transparent to the prolifers. Prolifers are tired of abortionists using such tactics to get abortion legislation enacted. For instance:

— Abortionists won't talk about their killing preborn children. They resort to euphemisms, such as: pro-choice (to kill a son or daughter); termination of pregnancy (by killing a son or daughter); right of privacy (to kill a son or daughter); medically necessary (to kill a son or daughter) . . . . etc.

— Abortionists want to define a human being in such a way as to selectively kill, by the unilateral decision of another human being, someone whom they decide is not a "person." How can abortionists decide who is and who is not a "person"?

— Abortionists wring their hands about the need to "treat" the health of a woman by abortion. If the abortionists are truly concerned about the well-being of each woman, they will support the proposed legislative language at the end of this testimony, which is specifically directed to "saving" the life of the woman and her preborn child or children.

— Abortionists like to talk about abortions which are "medically necessary," or "medically indicated." This Committee and the full Congress must take testimony from real doctors. You will find that there is no need to kill a preborn child as treatment for any born person.

— Abortionists like to plead for their money from the public treasury by using the plight of "poor" women, i.e., what rich women can have, poor women should be able to have. Abortionists must understand that in America, neither rich nor poor, can be able to kill their own sons and daughters. America is great enough to provide other things for poor people than merely the wherewithal to kill their children.

— Abortionists plead that it is less expensive to use tax dollars for abortions than to use tax dollars for the birth of welfare children and carry that child through to majority. This was even used as an argument on the floor of the House and the Senate. Imagine, our elected officials saying that it is cheaper to kill welfare clients than provide for their well-being. This is a pitiful misapplication of the cost-effectiveness of government.

— Abortionists plead that abortion is protected by the right of privacy. Since when is homicide—of a mother and physician killing a son or daughter—a matter of privacy. One human being killing another is still a homicide.

— Abortionists try to mistate the fact that a unique human being comes into existence when the sperm fertilizes the ovum, and, therefore, assure that a "little bit of killing" in the early moments of each human being's life would not be protected by the laws against homicide. Thus, the abortionists would continue to use abortifacients to kill a preborn child. Congress specifically said that such abortifacients could be paid for with federal funds. Yet, Congress took no testimony on the risks involved with these abortifacients, despite the warnings of the Food and Drug Administration. Congress is not only participating in the killing of preborn children, but also doing a disservice to women by giving official approval to abortifacients which are harmful to women.

— Abortionists plead for their funds to provide abortions to teenagers. They build in their own business by killing the son or daughter of teenagers without even notice to the teenager's parents. Abortions are the cause rather than the solution to problems facing young people today.

— Abortionists want "exceptions" to any strict prohibition on use of public funds for abortions. This is not to solve the so-called "hard cases," but to give the loopholes necessary to let the abortionists continue to get public money.

— Abortionists gave media attention to possible "payless paydays for public employees," when the Appropriations Bill was tied up with the abortion question. Any veteran observer in Washington knows that Congress will always pass a continuing resolution to keep funding authority current. It was sad to see the cruel use by the press and members of Congress of threatening no pay for public employees so that more money could become available to kill babies.

THE DEFENSE DEPARTMENT AND ITS ABORTIONS

The Defense Department's involvement in abortion is both a puzzlement and a sickeningly disturbing occurrence. It, therefore, deserves considerable questioning and discussion.

For instance, how did the Defense Department get involved in abortions? Where is the Congressional Act -- the statute -- the basic authorization -- for the Defense Department to use any of its appropriated funds to kill innocent preborn children? As shown elsewhere in this testimony, the authority cannot be inferred from the "health" provisions of Defense legislation. Why, then, Mr. Chairman, is the Defense Department engaged in the abortion business, openly and notoriously?

Inasmuch as there never has been authorizing legislation, Mr. Chairman, *MARCH FOR LIFE, Inc.* strongly urges this Committee to state clearly in the Defense Appropriations Act that no -- that means *NO* -- funds are appropriated for the killing of innocent preborn children by abortions.

Your authority is in the Constitution of the United States, which provides in *ARTICLE I, Section 8, Clause 1:*

> *The Congress shall have Power to lay and collect Taxes . . .*
> *to . . . provide for the common Defence and general Welfare*
> *of the United States; . . . .*

It is impossible that the activity of killing innocent preborn children meets the test of being either common defense or general welfare. It is not a proper function of the great Defense Department or any commissioned, enlisted or civilian defense personnel to defend Americans against innocent preborn children; rather, the killing of even one preborn human being is a crime against humanity.

Therefore, this Subcommittee on Defense Appropriations is without authority or power to appropriate public moneys to kill any innocent preborn children. Further, the slaughter of over one million innocent preborn human beings in our country annually is disrupting the general welfare of our society as the population is decimated and demoralized by the slaughter of its young. The general welfare in each city and town, border to border and through out the United States, is disrupted by the struggle which the civilian volunteer defenders of life are forced to wage at heavy odds against the bloody money-making abortionists, including those in the military and servicing the military.

Yet, data before this Subcommittee show the following incidence of killing innocent preborn children with tax dollars administered by the Defense Department:

	Number of Innocent Preborn Human Beings Killed Through Defense Dept. Abortions	Amount of Tax Dollars Used by Defense Dept. For the Killings	Average Cost Per Killing
FY 78 - In the Services:	8,537	$ 1,652,263.00	$ 193.56
FY 79 - In the Services:	304 *	57,140.00	187.96
FY 78 - CHAMPUS:	9,850	4,824,797.00	489.82
FY 79 - CHAMPUS:	63 *	61,125.00	970.23

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* FY 79 Defense Appropriations Act contained the following provision, which obviously was not used as a prohibition but as a loophole:
None of the funds provided by this Act shall be used to perform abortions except when the life of the mother would be endangered if the fetus were carried to term; or except for such medical procedures necessary for the victims of rape or incest, when such rape or incest has been reported promptly to a law enforcement agency or public health service; nor are payments prohibited for drugs or devices to prevent implantation of the fertilized ovum, or for medical procedures necessary for the termination of an ectopic pregnancy.

The fact that there are any abortions performed at all by the Defense Department means that the whole abortion activity must be investigated. Certainly, this Appropriations Committee cannot continue to write a blank check to the abortionists and let them fill in the dollar amounts at will, making unilateral decisions over which innocent preborn children live and which die with the blood money appropriated by this Committee.

At first glance of the above figures, it would appear that the dramatic one-year drop in Defense Department funded abortions signaled appropriate concern for protecting the lives of innocent preborn human beings within the jurisdiction of this giant administrative agency. However, the figures actually raise a significant number of very important questions, including:

-- Why are the figures for FY 1979 not *ZERO* babies killed and *ZERO* dollars spent?

-- What were the reasons for the Defense Department killing almost 400 preborn human being in FY 1979?

- **Are the Military Medics so unprofessional that they are unable to use modern medicine to save both the mother and her preborn child?**
- **Are the medical facilities of the Armed Services so inferior that they are unequipped to provide wherewithal to save both the mother and her preborn child for our military personnel?**

-- Why are the dollars for killing preborn human beings, which the Defense Department has reported shamelessly, so appalling high? Millions of dollars spent to kill babies! Between $500.00 and $1,000.00 to kill a preborn child under CHAMPUS? Could anyone seriously deny that killing preborn babies is a money-maker for the hit man fed by an unconscionable Executive Branch as unworthy dispenser of American tax dollars?

THERE IS NO "NEED" TO KILL INNOCENT PREBORN CHILDREN

The above questions are pertinent because, as I have pointed out in several submissions before the Congress, and point out again here, there is no "need" to kill an innocent preborn human being. Pertinent to this point is a question which was asked of *MARCH FOR LIFE, Inc.* in 1978 by the Honorable Louis Stokes, of the House Appropriations Committee. The question was:

> **Do you support any exceptions at all for abortions? What about cases of women who are crippled, who have multiple schlerosis, diabetes, cancer, heart disease, mental illness, or other of many medical conditions where a doctor and the woman would find the pregnancy to be inadvisable -- medically?**
>
> *(There was a three-page response to Mr. Stokes' question, which included the following statement by William J. Hogan, M.D., in private practice as Obstetrician/Gynecologist in Bethesda, Maryland.)*
>
> * * * *
>
> *We do not support any exceptions at all for induced abortion, which is the direct killing of an unborn child. We believe, with Hippocrates, that a physician, operating in the best interest of both his patients -- mother and child -- can never directly intend to kill either of them.*
>
> *As early as 1951, at the Congress of the American College of Surgeons, Dr. R. J. Heffernan of Tufts University, stated: "Anyone who performs a therapeutic abortion for physical disease is either ignorant of modern methods of treating the complications of pregnancy or is unwilling to take the time to use them."* {1} *How dramatic has been the further advance of modern medicine since 1951 hardly needs comment. Open heart surgery and kidney transplant are just two striking examples of this dramatic progress in medicine. Numerous successful pregnancies have been reported following open heart surgery and kidney transplant, to name just two medical problems.*
>
> *All the medical conditions you have mentioned in your question can be cared for skillfully in modern medicine, so that the life of the mother and the child are both sustained. The killing of the child within the womb of a woman with a serious medical condition, in itself, poses a risk to the life of the woman.*
>
> *Before abortion became legalized in America, doctors did indeed apply their medical skills in preserving the life of both mother and child. Dr. Frederick L. Good, former Surgeon-in-Chief of Boston City Hospital, Obstetrical & Gynecological Service, reported in 1951, that no therapeutic abortions were performed in that hospital in a 30-year period, and that during that time, the mortality rate due to conditions supposedly benefitted by therapeutic abortions had been zero.* {2} *There have been many major university hospitals that have gone a decade or more without performing a single therapeutic abortion. For example, prior to 1968, the University Hospital of the College of Medicine, University of Cincinnati, did not perform a single therapeutic abortion in 15 years.*
>
> {1} *Article in American Journal of OBGyn, Vol. 66, No. 2, Aug 1953, pp 335-345.*
>
> {2} *Good, MARRIAGE, MORALS & MEDICAL ETHICS, New York, 1951, p. 148-49.*
>
> * * * *

Mr. Chairman, for additional information on the "health issue" as an aspect of the Defense Department's participation in abortion, may I refer you to my testimony before the House Appropriations Subcommittee on Defense dated May 29, 1980. May I also refer to that testimony for information on aspects of the "religious issue," the so-called "women's issue," as well as the "legal issue."

THE OBJECT LESSON FROM CONGRESS' EXPERIENCE WITH STOPPING FUNDING OF ABORTIONS

In summary, Congress may draw some of the following guidelines for additional work to stop *all* public funding of abortions:

— Start from the right premise to get to the right outcome, namely, intend to stop *all* funds for abortion, mean that, and stick with it.

— Write legislation to save and care for human beings, namely, the defenseless preborn human being and preborn's mother and father. Do not write legislation for the abortionists or to appease the abortionists.

— Recognize that abortion is big business in killing human beings, much of which is paid for with tax dollars and tax exempt status. Congress doesn't even know how much public money is going into this business, and, therefore, cannot blindly appropriate funds to enrich a business. It would seem that the Congress would be particularly diligent in finding out the facts, because abortion is not a white collar enterprise but a bloody massacre equal to the "Holocaust."

— Recognize that there is no such thing as a "safe abortion." Every abortion kills at least a preborn human being, and subjects the mother of the preborn child to physical, mental, and emotional risks and damage.

— Write legislation to save both the mother and her preborn child, without exceptions.

— Don't compromise and then expect to "hold firm," because there is no position on which to hold firm. After compromising, it is impossible to draw a halt—the abortionists have already seen the weakness and will exploit it.

— Abortionists cannot be "appeased." Don't give them even one provision under which they can get public funds to kill preborn human beings. One exception leads to another, and another, and another, and another . . . .

— Recognize that abortion business deals not only with killing preborn children but also seeking them out for killing through prenatal diagnosis. Congress must provide funds to treat patients, *not kill* those found by a unilateral decision to be "defective."

— Congress and the Administration have approved abortion and are now deeply involved in the abortion business, thereby implicating our whole country. Congress and the Administration have the authority and power to stop the killing of preborn children. There will be an accounting of the activity of all public officials.

— History will record that some spoke up against the massacre of preborn children. There is a prolife movement across our country. Prolifers are tired of public officials not doing the job they are paid handsomely to do—to protect our people and our country. Prolifers are tired of using our time, energy, homes, families, and small financial resources from our own pockets to lobby Congress and the Administration to stop the killing in our country.

— Some things cannot be compromised: Human life is one. When you compromise any part of the life span, you participate in the killing of a human being.

— Don't permit the provision to stop public funding of abortions to be held hostage and defeated by diversionary tactics and emotional appeals such as: poor *vs.* rich, government workers' payless paydays, etc.

RECOMMENDATIONS FOR PROVISIONS OF APPROPRIATIONS BILLS PASSED BY CONGRESS

TO ASSURE THAT NO PUBLIC FUNDS SHALL BE USED FOR ABORTIONS

Begin with the firm attitude that *no* tax dollars shall be used for abortion, and clearly say so in the legislation. When getting to the "hard" issue of the "life of the mother exception," be sure that the premise for dealing with this issue is that *both* the mother and her preborn child shall be saved, and neither one is to be killed to save the other. The following positive approach is proposed, which is based on the premise that tax dollars shall be used to truly "save" lives, even if, unfortunately, some lives cannot, with current medical science, be saved. The proposed text is:

> *Sec.____. None of the funds appropriated under this Act shall be used to pay for abortions performed by any means during the prenatal period beginning when the sperm fertilizes the ovum; nor shall funds be used to promote or encourage abortions. When a true medical emergency exists with the physical conditions of a pregnancy and reasonable efforts and ordinary means are used in accordance with good medical practice to try to save the lives of the mother and her preborn child or children, funds appropriated hereunder may be used to reimburse for these necessary medical services, even though a life or lives cannot be saved.*

In order to clarify the intent of this section, it is recommended that the following language be included in the Committee's Report:

> *The purpose of Sec.____ is clearly that no reimbusement for abortions shall be allowed, and no funds shall be spent for abortions in any manner or means. This includes payment for drugs and devices which are abortifacients and payments for the services of anyone who prescribes such drugs and devices. Such payments cannot be made directly or indirectly.*
>
> *This Committee recognizes that at this stage of medical science there may be rare instances when the lives of both the Mother and her preborn child or children may be physically endangered by the circumstances of a pregnancy. When a true medical emergency exists with the physical conditions of a pregnancy, this Committee expects that reasonable efforts and ordinary means, in accordance with good medical practice, shall be used to try to save the lives of all patients—the Mother and her preborn child or children. Federal funds appropriated hereunder may be used to reimburse for these medical services undertaken to save the lives of these patients, even though the life or lives of one or more of the patients may not be able to be saved.*
>
> *Payments cannot be made directly or indirectly to treat mental, emotional, pre-existing physical conditions, or physical conditions not associated with the pregnancy by performing or prescribing abortion.*
>
> *The Committee expects that under these and similar conditions, the lives of all patients will be saved and that funds shall be available for this life-saving treatment.*

THE SUPREME COURT AND THE ISSUE OF FEDERAL FUNDING OF ABORTIONS

The Supreme Court's decision *Harris v. McRae* of June 30, 1980 underscores the position which *MARCH FOR LIFE* takes in the testimony, above. The decision -- not a courageous or a great one -- merely states what has been the law and intent of the law for a long time in our country. For instance, the Court recognizes that abortion is inherently different from other medical procedures, because no other procedure involves the purposeful termination of the "potential" life. The Court could not bring itself to say that a human being is killed by abortion, but it came close.

The Court agrees that the cutting off of public moneys for abortions bears a rational relationship to the Government's legitimate interest in protecting the fetus. Further, the Court explicitly stated that the Congress is entrusted with the decision of allocating the funds among competing interests. *MARCH FOR LIFE* again repeats that killing innocent preborn children is not a legitimate interest on which public moneys shall be spent. The Court says that when an issue involves policy choices as sensitive as those implicated by abortion, the appropriate forum for their resolution in a democracy is the legislature.

Thus, the Congress alone -- not the Court -- has the power to appropriate Federal funds, and, therefore, the Court does not have the constitutional power to direct the payment of federal funds for any expenditures by the Executive Branch. If tax dollars are used to kill innocent preborn children, the Congress alone bears responsibility for making those bloody tax dollars available.

Separation of powers is an important argument to make, with which I agree. But, it is not the most important argument, which I am making to this Committee today.

The core issue before America is: *Whether it is right or wrong for anyone -- in private or public -- to kill an innocent preborn child?* The answer is obvious: *IT IS WRONG -- it is a crime against humanity -- for anyone to kill an innocent preborn child, and it is wrong for anyone to direct such killing, and it is wrong for anyone to pay for such killing.*

Therefore, I put the question to you, Mr. Chairman and members of this Subcommittee:

✓ If anyone in a position of authority directed one human being to kill another innocent human being, or in any way collaborate with such killing, would one feel compelled to do so?

✓ If one did the killing or collaborated in the killing, would one stand before a tribunal and plead that one was merely following orders of a duly authorized superior?

✓ If one did make such a plea, would one expect the response of the tribunal to be any other than that at Nuremberg, in which our own government participated and, sitting in judgment of foreign enemies, held them to a standard of humaneness above and beyond what was *legal?*

The fact that the Defense Department is participating in any way, directly or indirectly, in the killing of innocent preborn children is not only repulsive but also contrary to every code of military ethics. For instance, armed services personnel can be held accountable for killing civilians, even in combat zones, and for killing POWs rather than taking them prisoner.

In this regard, let's look to history for some standards by which acts and their culpability can be tested. For instance, there are standards set out by the Tribunal sitting in Nuremberg in 1945 in judgment of our foreign enemies. Surely, the same level of standards should apply to domestic enemies. The Charter of that Tribunal, in setting forth the jurisdiction and general principles, provides in *Article 6* that:

> The following acts, or any of them, are crimes coming within the jurisdiction of the Tribunal for which there shall be individual responsibility:
>
> • • • •
>
> (c) CRIMES AGAINST HUMANITY: namely, murder, extermination, . . . and other inhumane acts committed against any civilian population, . . . whether or not in violation of domestic law of the country where perpetrated.
>
> Leaders, organizers, instigators, and accomplices participating in the formulation or execution of a Common Plan or Conspiracy to commit any of the foregoing crimes are responsible for all acts performed by any persons in execution of such plan.

The Charter of the Tribunal at the Nuremberg trials, go on to provide in *Article 7* that an official position shall not be considered as freeing anyone from responsibility or mitigating punishment. *Article 8* provides that the fact that an individual acted pursuant to order of his Government or of a superior shall not free him from responsibility. *Articles 9* and *10* provide that an organization can be declared to be criminal, and individuals may be tried for membership in such organizations.

Therefore, it follows clearly, that merely because abortion -- a crime against humanity -- can be said to be "legal" in our country today, does not make the act of abortion less inhumane or less a crime against humanity. Further, anyone in public or private life, in elected or appointed positions, who participates in or even supports abortion is open to the serious question of accountability for the crimes against humanity now going on in our country through abortion. Those organizations which advocate, participate in, propogandize, and lobby for abortion, along with their membership, are equally open to being declared criminal.

SO, MR. CHAIRMAN, WHAT TO DO?

I must ask you, Mr. Chairman and members of this Subcommittee, how can you sit politely and permit witnesses who represent organizations dedicated to killing babies come before you and plead for blood money from the public Treasury?

Noone on this Committee would permit a witness to come before you and ask for moneys to run racially segregated or otherwise degrading facilities. There would be an unanimous moral outrage, as there should be! And, you would send the witness packing, in no uncertain terms! Members of Congress, as elected legislators of the people, must do the same thing with witnesses who represent proabortion views and actions.

So, Mr. Chairman, what to do? It is very simple. As you manage this Appropriations Bill through the Congress, you stand on the Floor of the House of Representatives and say, for all the world to hear, that because the American people and their Government cannot be implicated in the killing of innocent preborn children, this Appropriations Bill has a section which provided unequivocally:

§ _____. *NO FUNDS FOR ABORTIONS.*

I am not talking about getting the "best bill possible in a difficult conference situation;" I am talking about standing up for the right to life of each and every born and preborn human being, because it is right to do so.

What to do? You shed the niceties of the legislative jargon on the Floor and in Committees and say that you will not participate in even "A Little Bit of Abortion." You also say that if this is not passed by Congress, you are prepared to dismantle all authorizing legislation which can conceivably be construed as permitting abortion. This is not time for wringing hands and feeling hamstrung by the Court

The position I am suggesting for this Committee is not one of being brave or courageous. There simply is no other tolerable position to take, unless one wants to be implicated in the slaughter of millions of innocent preborn children.

Respectfully submitted,

SUBCOMMITTEE RECESS

Senator **Rudman**. Thank you very much. We appreciate your statement.

The committee will stand in recess until tomorrow morning at 10 a.m.

[Whereupon, at 12:02 p.m., Wednesday, June 17, the subcommittee was recessed, to reconvene at 10 a.m., Thursday, June 18.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

TUESDAY, JUNE 23, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:10 a.m., in room S-406, the Capitol, Hon. Warren Rudman presiding.

Present: Senators Stevens, Andrews, Kasten, and Rudman.

CENTRAL INTELLIGENCE AGENCY

CIA BUDGET

The subcommittee heard the classified testimony of Adm. B. R. Inman, Deputy Director of Central Intelligence.

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

THURSDAY, JUNE 25, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9:10 a.m., in room S-406, the Capitol, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, Schmitt, Andrews, and Rudman.

NATIONAL SECURITY AGENCY

NSA BUDGET

The subcommittee heard the classified testimony of Lt. Gen. Lincoln D. Faurer, USAF, Director, National Security Agency/Central Security Service.

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

TUESDAY, JULY 7, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:30 a.m. in room 1223, Everett McKinley Dirksen Senate Office Building, Hon. Warren Rudman presiding.

Present: Senators Stevens and Rudman.

DEPARTMENT OF DEFENSE

DEFENSE AGENCIES

ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

STATEMENT OF DONALD B. SHYCOFF, DIRECTOR FOR OPERATIONS, OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

BUDGET REQUEST

Senator RUDMAN. [presiding]. Good morning.

Today we are going to hear testimony from witnesses in support of the fiscal year 1982 budget requests for the Defense Agencies. The total operations and maintenance request for all agencies is $4.7 billion for fiscal year 1982 which is an increase of $333 million or 7.6 percent above fiscal year 1981.

Our principal witnesses today are Mr. Donald Shycoff, Director of Operations for the OSD Comptroller; Vice Adm. Eugene Grinstead, Director of the Defense Logistics Agency; Lt. Gen. William Hilsman, Director of the Defense Communications Agency; Brig. Gen. Donald Aldridge, Deputy Director of the Defense Mapping Agency; Lt. Gen. Harry Griffith, Director of the Defense Nuclear Agency; and Mr. John Sproul, Acting Director of the Defense Investigative Service. We will hear these agencies in that order. All prepared statements will be included in the record.

Our chairman, Senator Stevens, is delayed in another hearing. He will be here to chair the hearing a little bit later.

Mr. Shycoff, if you will proceed to highlight your statement on the overall operations and maintenance request for the Defense agencies, your entire statement as well as all others will be included in the record this morning.

TABULATION CHARTS ON DA BUDGET BREAKDOWN

Mr. **Shycoff**. Thank you, Senator. I will submit tabulation charts for the Defense agencies budget to be included in the record.

Senator **Rudman**. Without objection, they will be placed in the record at this point.

[The charts follow:]

Operation and Maintenance, Defense Agencies
($ in Millions)

	FY 1980 Actual	FY 1981 Estimate	FY 1982 Estimate
Defense Investigative Service	38.9	58.3	76.2
Defense Mapping Agency	266.3	306.4	326.1
Defense Nuclear Agency	28.9	30.2	33.6
Intelligence & Communications	901.8	1,076.8	1,172.3
Defense Logistics Agency	1,081.0	1,233.0	1,292.4
Overseas Dependent Education	338.8	394.8	427.0
American Forces Information Service	22.8	31.0	32.1
Uniformed Services University of the Health Sciences	17.1	22.6	25.6
Civilian Health & Medical Program of the Uniformed Services	711.9	922.0	968.7
Medical Information System	26.9	37.9	46.9
Secretary of Defense	62.1	88.8	89.8
Office of Economic Adjustment	1.9	2.1	2.4
Defense Audiovisual Agency	-	14.9	17.0
Washington Headquarters Services	32.5	50.3	54.7
Office of Joint Chiefs of Staff	13.4	17.5	17.5
Defense Contract Audit Agency	89.6	100.3	102.7
Defense Audit Service	15.0	17.0	17.8
Total	3,648.9	4,413.9	4,702.8

FY 1982 REVISED BUDGET
OPERATION AND MAINTENANCE, DEFENSE AGENCIES
FY 1981-FY 1982 PRICE AND PROGRAM GROWTH
($ in Millions)

	FY 1981	Price Growth	Program Growth	FY 1982
Defense Investigative Service	68.3	1.0	6.9	76.2
Defense Mapping Agency	306.4	9.5	10.2	326.1
Defense Nuclear Agency	30.2	1.6	1.8	33.6
Intelligence and Communications	1,076.8	41.4	54.1	1,172.3
Defense Logistics Agency	1,233.0	29.2	30.2	1,292.4
Overseas Dependent Education	394.8	30.3	1.9	427.0
American Forces Information Service	31.0	2.2	-1.1	32.1
Uniformed Services University of Health Sciences	22.6	.9	2.1	25.6
Civilian Health & Medical Program - Uniformed Services	922.0	76.5	-29.8	968.7
Medical Information System	37.9	3.0	6.0	46.9
Secretary of Defense	88.8	3.6	-2.6	89.8
Office of Economic Adjustment	2.1	.1	.2	2.4
Defense Audiovisual Agency	14.9	.5	1.6	17.0
Washington Headquarters Services	50.3	3.3	1.1	54.7
Office of Joint Chiefs of Staff	17.5	.8	-.8	17.5
Defense Contract Audit Agency	100.3	.9	1.5	102.7
Defense Audit Service	17.0	.2	.6	17.8
Total	4,413.9	205.0	83.9	4,702.8

FY 1982 REVISED BUDGET
OPERATION AND MAINTENANCE, DEFENSE AGENCIES
END STRENGTH

	FY 1980	FY 1981	FY 1982
DEFENSE INVESTIGATIVE SERVICE	1,506	2,657	2,722
DEFENSE MAPPING AGENCY	8,137	8,177	8,295
DEFENSE NUCLEAR AGENCY	438	465	462
INTELLIGENCE AND COMMUNICATIONS	3,942	4,010	4,102
DEFENSE LOGISTICS AGENCY	44,245	45,688	45,753
OVERSEAS DEPENDENT EDUCATION	9,592	10,922	11,441
AMERICAN FORCES INFORMATION SERVICE	131	131	131
UNIFORMED SERVICES UNIVERSITY OF HEALTH SCIENCES	494	595	629
CIVILIAN HEALTH & MEDICAL PROGRAM - UNIFORMED SERVICES	205	205	205
MEDICAL INFORMATION SYSTEM	23	27	27
SECRETARY OF DEFENSE	1,223	1,269	1,269
OFFICE OF ECONOMIC ADJUSTMENT	29	29	29
DEFENSE AUDIOVISUAL AGENCY	16	543	543
WASHINGTON HEADQUARTERS SERVICES	326	405	405
OFFICE OF JOINT CHIEFS OF STAFF	274	288	288
DEFENSE CONTRACT AUDIT AGENCY	3,428	3,520	3,585
DEFENSE AUDIT SERVICE	379	403	409
TOTAL	74,388	79334	80,295

OVERVIEW OF BUDGET REQUEST

Mr. SHYCOFF. I was asked to come here today to provide a brief overview of this request.

Over the years the Department of Defense has consolidated a number of functions outside of the military departments in the interests of efficiency and improving the way we do certain things. We've found that over the years this appropriation has grown as more and more functions are moved into it. You are going to hear in a few minutes from five of the activities.

I have a series of charts that I think the staff has and you may have in front of you. I thought I would walk you through these charts and give you a brief look at what we have here.

As your remarks indicated we are requesting $4.7 billion. You will see from this handout the scope of the activities included here. The five that you will be hearing today are included in the first five lines.

There are two other significant activities that you are not going to talk about today. One is the CHAMPUS program which is $969 million. Here we pay the bill centrally for the CHAMPUS program for the Department of Defense, including the medical benefits to retirees and active duty dependents. The other is the Overseas Dependents School System which is $427 million. Other than the five, these are the most significant.

Also listed are the other activities which includes the Office of the Secretary of Defense. Our newest activity is the Defense Audiovisual Agency which you can see was set up in 1981. So over the years we may see more of this as functions get identified and items are moved.

The second chart gives an indication of the difference between 1981 and 1982. $205 million is required just for the same level of effort as required in 1981, and about $84 million is for program growth.

INFLATION RATE

Senator RUDMAN. What inflation rate have you used in these?

Mr. SHYCOFF. For purchase inflation, the rate is 8.4 percent which is consistent with the Federal rating guidance.

Senator RUDMAN. Which is inconsistent with what this committee thinks, but that is all right.

Mr. SHYCOFF. You will see that through each of the agencies. They have used the same amount.

The last chart shows that about 40 percent of the costs in this account goes for civilian personnel. I thought it might be of interest to array the numbers of people with the biggest single number being from Defense Logistics Agency. Again, you will be talking about that.

Senator RUDMAN. Is there any likelihood, particularly within the Defense Nuclear Agency and the Intelligence Communications part of this presentation, that there will be a need to close this session this morning to your knowledge?

Mr. SHYCOFF. I do not know. You will have to ask the other witnesses.

Senator RUDMAN. Fine.

Mr. SHYCOFF. So with that brief overview I would at this point let you proceed with the agencies unless you have some questions of a general nature that you would like to ask.

Senator RUDMAN. I think what we are probably going to do is proceed with the next witnesses and then possibly have some general questions.

Thank you, Mr. Shycoff.

DEFENSE LOGISTICS AGENCY

STATEMENT OF VICE ADM. E. A. GRINSTEAD JR., U.S. NAVY, DIRECTOR, DEFENSE LOGISTICS AGENCY

ACCOMPANIED BY:

REAR ADM. GERALD J. THOMPSON, U.S. NAVY, DEPUTY DIRECTOR, DEFENSE LOGISTICS AGENCY

WILLIAM J. CASSELL, COMPTROLLER, DEFENSE LOGISTICS AGENCY

JAMES R. JONES SR., BUDGET OFFICER, DEFENSE LOGISTICS AGENCY

PREPARED STATEMENT

Senator **RUDMAN**. Our next witness will be Vice Adm. Eugene A. Grinstead of the Defense Logistics Agency. Good morning, Admiral.

Admiral **GRINSTEAD**. Good morning, sir.

Senator **RUDMAN**. Would you like to summarize your prepared statement which will be included in the record? We would appreciate that.

[The statement follows:]

PREPARED STATEMENT OF VICE ADM. E. A. GRINSTEAD, JR., SC, USN
DIRECTOR

DEFENSE LOGISTICS AGENCY (DLA)

Mr. Chairman and Committee Members:

It is a pleasure to appear before this Committee to discuss the resource requirements of the Defense Logistics Agency.

I will highlight the character and size of Agency programs, review with you Agency operational accomplishments and summarize our FY 1982 Budget Request.

CHARACTER AND MAGNITUDE OF PROGRAMS

The Defense Logistics Agency -- which was organized twenty years ago to bring the advantages of centralized management to Defense logistics -- is an essential part of the DoD logistics system and provides support to the Military Services worldwide. DLA buys, stores and provides a wide variety of consumable supplies, administers contracts and manages the reutilization and disposal of surplus personal property.

In addition to these prime mission assignments, we:

- Operate the Federal Catalog System in support of both U.S. military and civilian agencies as well as NATO members and other friendly foreign countries. The system provides item identification and technical description for all items of supply.
- Maintain, store and facilitate the re-use of Government-owned industrial equipment. In addition to avoiding numerous new purchases of equipment by encouraging the use of Government-owned assets, this program maintains the DoD's peacetime industrial base.
- Provide scientific and technical reports and information services to the Defense research and development community.

WORKLOADS

DLA's annual workloads, which generally have been increasing in recent years, vary according to the demands placed on the Agency by its Military Service customers. As a key logistics contributor to force readiness, we:

- Buy and supply fuels, food, uniforms and textiles, medical supplies and about half the hardware items used by the Armed Forces -- more than $13 billion in annual procurements.
- Receive and ship nearly 18 million line items from our depots.
- Process over 28 million supply requisitions each year.
- Administer over 290,000 contracts.
- Pay 3 million invoices totaling more than $31 billion.

- -- Manage the reutilization and disposal of surplus property having an acquisition value of $4.8 billion. This involves the receipt and shipment of nearly 6 million items.

Additionally, we:

- -- Maintain and make available scientific and technical information on over one million research and development reports.
- -- Make stock fund sales of nearly $13 billion from an inventory of just over $8 billion.

In our January Budget Request, we estimated FY 1981 and FY 1982 workloads to be greater than FY 1980 levels. Workoads thus far this year are running some 4.4% higher than the initial estimates, and we are confident that they will continue to increase.

RESOURCE SUMMARY

Although our workloads have been on the increase for the past several years, our authorized civilian employment over this same period has shown a decline. We have managed to accommodate increased workloads with reduced employment through an aggressive productivity improvement program. Our program has taken the form of increased automation, organizational streamlining, reduction of overhead, and other management improvements. Unless additional resources are provided, we cannot accommodate the significant workload increases in FY 1981 and FY 1982, an almost 12% increase over FY 1980, without unacceptable declines in the quality of our customer support. In recognition of this, additional resources are included in President Reagan's budget amendment.

ACCOMPLISHMENTS

DLA has achieved notable accomplishments in improving operations. Some of the more significant attainments during FY 1980 include advances in Supply Operations, Procurement and Contract Administration.

Supply Operations

In supply operations, where we manage one-half of the consumable items used by DoD and fill two-thirds of the DoD requisitions, we:

- -- Provided foreign and domestic disaster support in the form of tents and medical supplies to Thailand, the Central African Republic of Somalia, Pakistan, Liberia, St. Lucia Island and the Cuban refugees in the United States.
- -- Tested a contractor-operated depot to supply parts for commercial automotive vehicles, materials handling and construction equipment to overseas customers.
- -- Continued our airlift challenge program in which, with customer concurrence, air-eligible shipments were downgraded to less expensive methods of transportation. During FY 1980, our customers benefited to the extent of $13.6 million in costs avoided as the result of this effort.

A computerized freight consolidation procedure is being tested which is expected to reduce transportation and packaging costs significantly while decreasing cargo damage and pilferage. We also have developed an ADP system for planning sea van container loads and producing required shipment documentation. The system maximizes the utilization of the sea van cube and reduces the requirement for shipment planning personnel.

A year ago the depot at Dayton, Ohio was closed and the electronic supplies were moved to our depots at Richmond, Virginia and Ogden, Utah and to the Navy depot at Norfolk, Virginia. This adjustment permitted savings of 167 personnel and $3.5 million annually.

Procurement

In response to petroleum industry recommendations to parallel more closely commercial practices, we revised payment procedures to expedite payments to overseas contractors supplying fuel to military bases at the retail level. In addition, our first long-term contracts for wholesale level bulk fuel requirements were awarded in FY 1980, with the majority extending over a five year period.

Of the total $8.4 billion which we placed in prime contracts with U.S. business firms in FY 1980, $3.3 billion went to small businesses with $290 million awarded to small disadvantaged business firms. This resulted in increases of 17% and 36%, respectively, from the prior year. In addition, contracts awarded to blind or other handicapped industries more than doubled, from $14 to $31 million.

Contract Administration

In Contract Administration Services several actions have been taken to improve support.

-- The automated progress payment system that was addressed last year is now fully operational.

-- In Quality Assurance, we are in the process of expanding the Contractor Assessment Program (CAP) to all contractors. The CAP is a broadly-based motivational award approach to excellence in product quality through public recognition of demonstrated quality of performance. The program will benefit both industry and Government.

-- As a part of a continuing review of organizational structure, we began in October 1979 to realign the Defense Contract Administration Services Management Areas. This realignment, which was completed in September 1980, reduced the number of offices from 47 to 37 and produced annual savings of $2.4 million. We also merged our contract administration and production functions at our 9 DCAS Regions and 37 management areas. This allowed us to reduce overhead -- a reduction of 85 positions -- and realize annual savings of approximately $2.4 million.

FY 1982 APPROPRIATIONS

Our Operation and Maintenance request of $1,292.444 million is $59.467 million greater than our FY 1981 availability. It consists of increases of $69.462 million offset by decreases of $9.995 million. The increases fall into two categories: $27.695 million for price growth and $41.767 million in program growth.

Increases

The amount requested for price growth includes:

-- $7.076 million as Annualization of FY 1981 Pay Increases for Wage Board and Foreign National Personnel.

-- $20.619 million for inflation in the price of purchased goods and services.

Program growth changes are:

-- $.622 million for payments to the Department of Labor as reimbursement for benefits paid to our employees under the Federal Employees Compensation Program.

-- $24.972 for the financing of additional work years required to process expected workload increases.

-- $3.004 million of which $1.484 million is required as the result of the discontinuation of telecommunications bulk rate service. The remaining increase of $1.520 million is required to modify or maintain various telecommunications systems/projects.

-- $13.169 million for modernization of our Automatic Data Processing equipment. Our Automated Data Processing Equipment Replacement Program (ADPER) requires a substantial investment over the next several years to bring our computer equipment up to present standards of reliability, maintainability and capability. The ADPER increase needed in FY 1982 is $10.459 million. $2.710 million is requested for augmentation of the Defense Integrated Data System and for short term interim improvements to other automated information systems prior to completion of the total ADPER effort.

Decreases

The total decrease is $9.995 million. $3.966 million is the result of functional transfers involving the Department of the Navy ($3.044 million) and Department of Education ($.922 million). We plan to reduce $4 million by withdrawing from previously programmed levels in contractual efforts. We also plan a reduction of $2.029 million in real property maintenance resources. This will permit us to maintain the backlog of essential maintenance and repair at FY 1981 levels.

OTHER APPROPRIATIONS

Mr. Chairman, I would like to briefly address our other appropriation requirements.

Procurement

Our FY 1982 request for procurement funding is $17.592 million. Included is $2.675 million for the procurement of automotive equipment; $3.743 million for mobile materials handling equipment; $2.884 million for purchase of ADP equipment currently leased; and $2.583 million for the replacement of currently owned telecommunications equipment. The remaining $5.707 million is primarily for items such as cranes, pumps, air compressors and replacement office equipment, miscellaneous warehouse equipment and industrial facilities equipment.

Military Construction

We are requesting $71.554 million for our Military Construction Program in FY 1982. $47.100 million is required for fuel storage at Wake Island, Korea and Hawaii. We plan to spend an additional $5.600 million to construct a hazardous materials storage facility at the Defense General Supply Center in Richmond, Virginia. In addition, $5.320 is programmed for nine projects under the Energy Conservation Investment Program (ECIP). The remaining $13.534 million is for such projects as expanding a mechanized freight terminal, upgrading an ADP facility, relocating one of our disposal offices and constructing pesticide storage.

Research, Development, Test and Evaluation

DLA does not perform research and development as such; we do, however, operate the Defense Technical Information Center (DTIC) which provides information on completed and ongoing projects to the RDT&E community. In addition, ten contractor-operated Information Analysis Centers are financed under this appropriation. These centers collect, store and disseminate scientific and technical information in highly specialized fields. We are seeking $18.506 million in FY 1982 for these purposes.

Stock Fund

We are also requesting $179 million to increase wholesale petroleum inventory.

CONCLUSION

Mr. Chairman, before responding to your questions, I would like to make a few additional comments.

I have highlighted some improvements and significant accomplishments. The savings are real and substantial. They were accomplished because of the competency of the DLA military and civilian work force. We do recognize, however, that there are areas where we could be doing better, and we are moving as quickly as we can to make the necessary changes.

As you can tell from the data we submitted, our workloads continue to increase and exceed our forecasts. Fortunately, our productivity remains high and our support to the Military Services effective. I would like to stress that the budget we have requested represents the minimum needed to continue the logistics support essential to the Military Services.

INTRODUCTION OF ASSOCIATES

Admiral **Grinstead**. Senator, I am Gene Grinstead, as you know. I have been on the job about 5 days and I have done a lot of work trying to understand what we have here today. I have with me Adm. Jerry Thompson, who is the Deputy for Contract Administration and Procurement; Bill Cassell, who is the Comptroller of the Defense Logistics Agency; and Jim Jones, who is the budget man.

We have come forth with a budget that basically is kind of level except for some iterations. One, we are trying to annualize some increased personnel requirements that we have. There is about $24 million in there for that. There is some extra military construction in here for fuel facilities and so forth, but generally it is a kind of level program. There is some procurement inflation that we talk to, and I think we have done a good job for you on productivity.

WORKLOAD INCREASE

We have about a 12 percent increase in workload over 1980. We are experiencing about a 4.3-percent increase over the programed workload in 1981. So we are asking to get even with the board in 1982.

With that, I think those are the highlights. I will be glad to take any of your questions.

TRANSFER OF FUNCTIONS

Senator **Rudman**. I would like to ask you to start out with the transfers of functions between the Department of the Navy to the Department of Education, a $4 million decrease there. Would you explain those functions?

Admiral **Grinstead**. In the case of the transfer to the Navy, DLA closed a depot at Dayton and a large part of that stock was relocated to Norfolk. Those basically were common items to Navy use. It will end up being a workload shift from Dayton to Norfolk, and that decrease is related to that shift.

EDUCATION

In the case of education, it was originally a planned shift to the Department of Education when it was established. As we learn more about it, what will happen is a major part of the workload to support that program will continue down at our Richmond depot, but on a reimbursable basis.

Senator **Rudman**. You expect the 1982 workload to require a funding increase of $25 million. The justification suggests the funding is for making inroads on quality deteriorations which have occurred in tertiary work. What does that justification mean? Are you going to have some contracting out of some of that workload?

Admiral **Grinstead**. As I understand it what has happened is we have picked up in 1981 about 900 additional people. This is to pay for those 900 people through 1982 plus an extra 50. There is about an 1,800 deficiency. We hope to accomplish the difference in that with productivity and reorganizational savings.

ADDITIONAL END STRENGTH REQUIREMENTS

Senator **RUDMAN**. You have got an 1,800 additional end strength requirement, as revealed by your special purpose data and other engineered standards. Could you elaborate on that?

Admiral, I know you are new on the job. If there is anybody on your panel who you want to answer the question, we will be pleased to have them.

Admiral **GRINSTEAD**. I will let Bill Cassell take this.

Mr. **CASSELL**. If I may address the 1,800 people, in the House Appropriations Committee report last year they asked us to use our engineered standards as part of the budget building process. Roughly 60 to 65 percent of our jobs are engineered. We think we know how long it takes to perform tasks covered by standards. Several of them are out of date and we are moving into a new method of measurement. Therefore we have not used them in budget preparation.

In order to comply with the request of the House while at the same time building a budget that we have confidence in, we put the budget together the way we have for the past several years, but then said that if we used the standards we had, knowing some of them are wrong, it would have come out to 1,800 more people.

Senator **RUDMAN**. It just seems at first brush to me to be a general way to approach that. Is there a better way to handle that?

Mr. **CASSELL**. Sir, if we could get the standards developed to our satisfaction—and it will take time because there is manpower involved in doing this—we would have one more facet or element to use to justify our budget. It would not be the only one. We would not take these standards and add them up. It would merely serve to satisfy ourselves, within a reasonable range, what we need and hopefully satisfy you also.

STANDARDS FOR END USE REQUIREMENTS

Senator **RUDMAN**. What kind of a philosophical mirror did you put against this? Did you do this very conservatively? Did you do it in a very liberal way? Are you saying worst case as these standards are applied to end up with 1,800 people? Could you end up needing 2,400 to get the job done? Might you only need 900?

I guess I want some feeling for how confident you are in these figures, because that seems to be a rather interesting way to extrapolate an end use requirement.

Mr. **CASSELL**. Of those standards that we feel we can transfer to our new system, we are probably 40 percent complete. Those numbers are in here in the calculation that leads to the deficiency of 1,800, the other 60 or so percent are also in the calculation. The standards are out of date and we do not have a great deal of confidence in them. Nevertheless we used them. They are technically approved.

Senator **RUDMAN**. So what you are saying is as to 60 percent of this you do not have too much confidence in these figures.

Mr. **CASSELL**. That is right, but we do not request it.

Senator **RUDMAN**. I understand that.

When do you think you will have a better handle on this for us?

Mr. **Cassell**. We hope to have a better handle year by year. I would guess 2½ to 3 years.

Admiral **Grinstead**. These standards are a moving target. Every time we make a change in procedures to upgrade the ADP, the standard we were using is going down the drain. So it is a never-ending battle. I think what we have done, even though you had an engineered standard, you saw yourself performing somewhat better than that so you used what I will call the most efficient productivity standards. We might be able to catch up with those standards, but it is not something that is ever stable. In this business it is changing all the time.

AUTOMATED DATA PROCESSING EQUIPMENT REPLACEMENT

Senator **Rudman**. Let me just ask one other question. You have an industrial requirement here for 1982 of $10.5 million for automated data processing equipment replacement, an increment of a total of $218 million requirement. Can you tell us about the funding profile of the next few years? If you cannot supply all of that today, for the record would you elaborate on the specifics on how that replacement program estimate has been compiled?

Admiral **Grinstead**. Let me have Bill Cassell handle that.

Mr. **Cassell**. We will have to supply the specifics for the record. The program is pretty much leveled starting in 1984. At the moment we are working on a system design and very preliminary hardware examination.

Senator **Rudman**. You will give us that for the record then.

Mr. **Cassell**. Yes.

[The information follows:]

Automatic Data Processing Equipment Replacement Program

The Automatic Data Processing Equipment Replacement Program (ADPER) funding profile for the next few years is:

Fiscal year 1982	$12,300,000
Fiscal year 1983	24,900,000
Fiscal year 1984	18,600,000
Fiscal year 1985	17,200,000
Fiscal year 1986	19,900,000
Fiscal year 1987	19,900,000

SATISFYING ADP REQUIREMENTS

Senator **Rudman**. Admiral, did you want to add anything to that?

Admiral **Grinstead**. I would like to point out that it is so difficult to satisfy ADP requirements due to the time consuming process under the rules that we have that almost all Government activities, particularly in the business we are in where everything is so automated, are running way behind the state of the art. I would tell you that I think the requirement for upgrading ADP is one of the most crucial challenges that I have observed in DLA.

Senator **Rudman**. Mr. Chairman, I have no other questions.

Senator **Stevens**. I apologize for being late. I am involved in another hearing. I am liable to be called back but I did want to be here. I hope you will continue, Senator.

Senator **Rudman**. I will be here for the entire meeting.

DISCONTINUATION OF TELECOMMUNICATIONS BULK RATE SERVICE

Senator **Stevens**. You mentioned you need $3.004 million of which $1.484 million is required as a result of the discontinuation of telecommunications bulk rate service. That is million, right?

Mr. **Cassell**. Yes, sir.

Senator **Stevens**. What is this discontinuation of telecommunications bulk rate service? What does that mean? What did you do to bring that about?

Mr. **Cassell**. Sir, we did not do anything. One of the regulatory agencies, I believe it was the FCC, discontinued the tariff that allowed lower rates for larger users on long distance.

Senator **Stevens**. The net result was that you run up about $1.5 million, is that right?

Mr. **Cassell**. Yes, sir.

Senator **Stevens**. We will have to check on that with another subcommittee to find out why they did that.

ADPER MODERNIZATION COSTS

What about this? You say the ADPER increase needed for fiscal year 1982 is $10.459 million. What is the total cost of that modernization?

Mr. **Cassell**. It is $176 million spread over the period 1981 through 1987. That is the gross cost. Now we have assets already available to us of some $60 million. The net cost is $112 million.

Senator **Stevens**. Your justification I am told says $218 million. Where is that justification?

In any event did you explain this to us last year? When did you start this automated data processing equipment replacement program?

Mr. **Cassell**. We started it last year, sir. Yes; we did say that that was the first increment of a very expensive program.

Senator **Stevens**. What is involved? Are you going to completely replace all of your automatic data processing equipment?

Mr. **Cassell**. In our supply areas and our contract administration areas, yes, sir, it is almost everything.

Admiral **Thompson**. There are some peripherals that we can keep, but the main frames are a couple of generations behind the times and are saturated, sir, and do need to be replaced.

Senator **Stevens**. On this automated data processing equipment, you need the next generation before you get delivery of the first. How old is the equipment that you are replacing?

Admiral **Thompson**. I had better supply that for the record. I will say 10 to 12 years for purposes of discussion.

[The information follows:]

Computer Use by Agency

The Honeywell hardware in our DCASRs has been used by DLA for nearly 10 years and the IBM 360 hardware at the centers and depots for 10-14 years. In most instances the IBM computers used by DLA were acquired from the used computer market.

CONTRACT ADMINISTRATION

Admiral **Thompson**. In the contract administration area with which I am the most familiar we are two generations behind what is in common industry use now. We are really having trouble finding people who are willing to program it because it is no longer what they are teaching in school.

EQUIPMENT MODERNIZATION

Senator **Stevens**. Has this new equipment got any ability to be modernized as the equipment changes? I find that there is one series of computers where you can literally upgrade them without buying the whole blasted thing again. Is this possible? Have you looked at that this time?

Admiral **Thompson**. Yes, sir, part of the criteria that we are looking for is the upgrading, not to get into a situation where we are unable to keep up with industry again. But the techniques the Government is presently using for ADP procurement make it hard to use, in my opinion, just routine industrial practice. We have to ignore some of the cost in order to maximize the competition.

COMPUTER UPDATING

Senator **Stevens**. I think I am in my good friend Senator Rudman's area. He deals with computers. I have just come back from a trip home and I was told by several people about some of their problems with computers and getting them installed only to find out that the industry was already a step ahead of them. It seems to be a constant problem as you try to go into that.

This says that $218 million over the next several years in required to bring our computer equipment to present standards of reliability, maintainability and capability. You have $10.459 million this year and an average net increase of $19.4 million for the fiscal years 1983 through 1986.

Mr. **Cassell**. The higher number, the $200-some million is the 15-year life cycle. The number I gave you is the 1981 through 1987 acquisition and software related figure.

Senator **Stevens**. But you did tell us when we gave you the $9.9 million last year that we were going to have a program that large?

Admiral **Thompson**. Yes, sir, Bill and I testified and we took pains to make it clear.

Senator **Stevens**. Why does it take so many years to do it? The way this industry is working, by 1985 or 1986 you are going to be two generations behind again unless you find this system that can be modernized as you go.

Admiral **Grinstead**. You have only so many people to develop the software, and then go around and implement it. You have a lot of places to hit. It probably is also a function of leveling off the money requirements.

Senator **Stevens**. That is what I was afraid you were going to say. That is sort of penny-wise and program-foolish as far as I can see.

It really is something if you are going into equipment, you are liable to end up in 1985 and 1986 buying equipment that is not compatible with what you bought this year.

Admiral **Grinstead**. We probably will buy all of it under one multiyear contract and it just takes that long to install it.

COMPUTER SOFTWARE CONTRACTING

Admiral **Thompson**. We also have a big software job. We are behind the times in that too.

Senator **Rudman**. Who does that software, by the way?

Admiral **Thompson**. We have a central design activity for the agency in Columbus, Ohio.

Senator **Rudman**. Has there ever been any comparative cost studies done as to what it would cost to contract some of that software out and thereby shorten the timespan of getting it on line with the main frame equipment as opposed to doing it yourself?

Admiral **Grinstead**. We have done some comparative analyses on a lot of aspects of the ADP software. On the other hand I doubt on this one, because the programs are so large and so complex that you have to be working continuously. On a deal like this, probably what you would end up doing is just contracting out the programing versus the system design and system analysis work.

Senator **Rudman**. Mr. Chairman, if I may just continue with this line for a moment.

Senator **Stevens**. Yes; go right ahead.

Senator **Rudman**. Your answers tend to be in conflict to the chairman's questions.

On the one hand you say that you are doing it on a multiyear basis to level out the funding. On the other hand you say that you have got staffing requirements. Now I think it has to be kind of one way or the other for this reason. If we were to say fine, we will find $177 million for you next year, then will you come back and say we cannot possibly use it because we could not possibly get the software design and the system put together in that period?

Admiral **Grinstead**. I think the answer to that would be no, we could not use it in that time period.

Senator **Rudman**. So really it is more of a staffing requirement in terms of internally getting the software put together with the main frame design and getting the terminals out, given it is a question of money all in the first year. Is that correct?

Admiral **Grinstead**. I would say yes, it is a staffing requirement. On the other hand there is a lot of pressure to level out.

CONTRACTING OUT OF SOFTWARE

Senator **Stevens**. May I ask one question?

How much of this are you contracting out? Are you doing this in-house?

Admiral **Grinstead**. We plan to use as much contractor support as possible in getting ADPER on line quickly. For example, we will limit our in-house efforts to basically those associated with program management and use contracting extensively (at least 50 percent of the effort) for areas such as planning and analysis, teleprocessing redevelopment and file conversion. In fact, we plan to contract out the entire application code conversion.

Senator STEVENS. It is in-house?

Admiral GRINSTEAD. Yes, sir.

Senator STEVENS. The modernization is done in-house.

Admiral GRINSTEAD. The modernizaitón, the software aspects of the problem, building the programs is done in-house.

Senator STEVENS. Of this $218 million how much do you think you are going to contract out?

Admiral GRINSTEAD. Most of that is hardware.

Mr. CASSELL. The hardware and software combined is $206 million. Coversion costs are $21 million. That is a 15-year life cycle.

Senator RUDMAN. Mr. Chairman, if I may I want to say one thing.

We could be getting into a situation where we are going to spend this kind of money for equipment and then by the mid-1980's, particularly 1985, 1986 when the new so-called 16-bite chip is out and completely makes obsolete everything in terms of the number of characters you can display at the same time, you could end up with $176 million worth of equipment and could be sitting before a committee like this in 1986 saying you now want to go into a program to replace obsolescence which was casued by the fact that you never got to use the equipment in the first place because by the time you got it on line and you got the programs designed you had new equipment.

It seems to me that for the record what we ought to see is how much capacity you have to get this equipment on line and get it on line quickly, because if you do not maybe we ought to do something about that. There are places in this country and there is plenty of capacity in this country to design software and do it quickly and bring it on the main frame and terminal equipment at a more rapid rate. That is what private industry does.

I think you ought to, for the record, come back and tell us what internal analyses you have done to see whether or not you get this stuff going and going quicker. Otherwise, we simply will be providing more and more money to buy more and more computers which will become more and more obsolete at a rapid rate. I think that concerns us, not just with your agency but with all of them, because if you add up all of the ADP equipment we are buying this year for the Defense Department, it is an enormous amount of money.

CENTRALIZATION OF COMPUTER EQUIPMENT

Senator STEVENS. Is there not some way we can centralize some of this computer equipment as far as the whole DOD is concerned? I am starting to see a pattern here that everybody is modernizing and everybody is modernizing over a period of time and we are going to build a new building for all of these computers.

Admiral GRINSTEAD. Excuse me, Senator. Could I go back to Senator Rudman first?

Senator STEVENS. Sure.

Admiral GRINSTEAD. First I would say we applaud your attitude because we think there are some major changes needed in this world. So we will come back and address the things you brought up.

As far as centralization goes, there has been a tremendous amount of it done. There is a lot of difference in the type of applications we are talking about. If you are talking about computers to run an industrial activity versus a supply warehousing type activity, there is a world of different type computers, different software and the people who are familiar with the system design are different.

We have within this organization one outfit and we do a lot of work for all OSD, for all services at the direction of OSD. There is a lot of accomplishment in that regard in terms of centralization already. One system has been designed to deal with warehousing operations. Each service will have to adapt to and use it as he goes forward with a modernization program

AGENCY INFLATION RATE

Senator STEVENS. I have one last question. I notice your price growth is $29.2 million, program growth is $30 million. What would you say has been the inflation rate that you have encountered throughout your agency?

Mr. CASSELL. It is 8.4 percent.

Senator RUDMAN. That is what you have put into your projections. I think Senator Stevens' question was what have you experienced?

Senator STEVENS. What was your experience? I know the 8.4 is at OMB's direction. What are you actually encountering? Do you have any figures to show what you are actually encountering in the way of inflation in terms of your activities?

Mr. CASSELL. We do not have any recent figures. I could give you the first half of 1981 versus 1980. Recently we have noticed softening particularly in petroleum, but I realize that is not in this budget.

Senator STEVENS. I would like to know what it was in 1980 and what it was in the first 6 months of 1981, the actual rate of inflation.

Admiral THOMPSON. We will supply that for the record.

Senator STEVENS. Thank you, very much.

[The information follows:]

COMPOSITE FOR INFLATION RATE

We sampled several non-labor elements of expense at our field activities in order to develop an inflation composite for the Agency. While the results varied widely, we estimate that the inflation increases experienced in fiscal year 1980 were 10.5 percent and those during the first half of fiscal year 1981 were 10 percent.

DEFENSE COMMUNICATIONS AGENCY

STATEMENT OF LT. GEN. WILLIAM J. HILSMAN, U.S. ARMY, DIRECTOR, DEFENSE COMMUNICATIONS AGENCY

ACCOMPANIED BY:

DR. IRWIN L. LEBOW, CHIEF SCIENTIST-ASSOCIATE DIRECTOR, TECHNOLOGY, DEFENSE COMMUNICATIONS AGENCY

WILLIAM H. FRITZ, BUDGET OFFICER, DEFENSE COMMUNICATIONS AGENCY

TELPAK PROGRAM

Senator STEVENS. Our next witness is Lt. Gen. William J. Hilsman, U.S. Army, Director of the Defense Communications Agency.

General HILSMAN. I can answer Senator Stevens' question on TELPAK. I have run that program.

Senator STEVENS. Thank you.

General HILSMAN. Long haul point-to-point communications circuits for the DOD are negotiated by an office that I have in Illinois, near St. Louis. We had a rate that we have been able to get with A.T. & T. over the years called a bulk rate, TELPAK rate. Some of the smaller companies challenged that because bulk rates are not really fair to them.

There has been some direction from the FCC to incorporate the little guys into the bulk rates. A.T. & T. did not like that and it was decided to cancel the bulk rates. We went all the way to the Supreme Court trying to retain TELPAK service, but a month ago we lost. That means a budget increase to DOD in fiscal year 1982 of some $50 million and to the total Government of $120 million.

So DLA did not cause that. That was caused by action beyond their control.

WATS LINE CONCEPT

Senator STEVENS. Your bulk rates, were they tied into the WATS line concept?

General HILSMAN. No, sir. WATS service deals with a flat rate discount offered by A.T. & T. for long-distance telephone calls to or from a specific telephone number. TELPAK service deals with discount rates offered for point-to-point intercity circuits. We gathered circuit requirements from DOD and other users to take advantage of this bulk rate. Any way we could increase the number of circuits to take advantage of those rates, we did. Of course, competing carriers believed they were being penalized by an unfair bulk rate. The FCC required TELPAK to be available for shared use and resale for the little guys' benefit. A.T. & T. would not agree, and they decided to discontinue TELPAK.

Senator STEVENS. We should follow that $50 million and see if we got it.

Thank you.

PREPARED STATEMENT

Senator **Rudman** [presiding]. General Hilsman, if you would like to summarize your statement, the full statement will be put in the record.

General **Hilsman**. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF LT. GEN. WILLIAM HILSMAN, USA, DIRECTOR

DEFENSE COMMUNICATIONS AGENCY

INTRODUCTION

Mr. Chairman and Members of the Committee:

I am pleased to have this opportunity to present to you the Defense Communications Agency budget request for fiscal year 1982.

DEFENSE COMMUNICATIONS AGENCY RESPONSIBILITIES

The Defense Communications Agency (DCA) is responsible for (1) system engineering, management control and operational direction of the Defense Communications System; (2) providing system engineering and other technical support to the National Military Command System; (3) supporting the Joint Chiefs of Staff in carrying out their responsibility for the Worldwide Military Command and Control System (WWMCCS) standard automatic data processing systems; (4) providing system engineering and technical guidance for implementation of the WWMCCS architecture; (5) system engineering of the Minimum Essential Emergency Communications Network; and (6) developing system architecture for all military satellite communications systems. In addition, the Director of DCA has separate and distinct responsibilities as Manager of the National Communications System and Chairman of the Military Communications-Electronics Board.

BUDGET SUMMARY

The Defense Communications Agency budget estimate for fiscal year 1982 is $316.0 million in four appropriations as shown on Chart 1. My statement will highlight significant elements of the estimate. Additional explanation is included in the justification material which was furnished separately.

SUMMARY OF DCA BUDGET
($ in Millions)

APPROPRIATION	FY 1980	FY 1981	FY 1982
Operation and Maintenance	$103.5	$123.2	$163.5
Procurement	6.6	6.9	14.7
Military Construction	0	0	.9
Research, Development, Test and Evaluation	46.4	56.2	136.9
Total	$156.5	$186.3	$316.0

CHART 1

OPERATION AND MAINTENANCE

Operation and Maintenance funds are requested for the operating costs of the DCA Headquarters and the field activities through which DCA carries out its operational responsibilities in support of the Defense Communications System (DCS) and the Worldwide Military Command and Control System (WWMCCS), which includes the National Military Command System (NMCS) and WWMCCS System Engineering (WSE). The request for fiscal year 1982 is $163.5 million, an increase of $40.3 million over the current estimate for fiscal year 1981. This increase includes $6.2 million for price growth of goods and services.

For the DCA Headquarters program element, we are requesting $18.1 million, which is $917 thousand more than the current estimate for fiscal year 1981. This increase is the result of a reasonably foreseeable growth in the price of goods and services, additional costs of facilities maintenance upkeep, and increased costs relative to the transfer of disbursing and accounting functions from the Military District of Washington to the Agency.

For the operating costs of Defense Communications System field activities, we have requested $80.2 million, an increase of $27.0 million above the fiscal year 1981 amount. This increase includes $2.8 million for price growth of goods and services and $24.2 million for program growth. Major items funded by this program growth include expanded requirements for the National Communications System (NCS), increased efforts related to voice privacy equipment, new efforts in communications protection, and support of Presidential Directive 53 (issued 15 November 1979) tasking the NCS to increase survivability/endurability of national telecommunications assets after nuclear attack.

Support of the National Military Command System (NMCS) in areas other than data processing has been estimated at $8.2 million, which is $1.2 million above the fiscal year 1981 requirement. Price growth of goods and services has been estimated at $364 thousand. The additional $815 thousand is requested to continue near-term NMCS enhancements required to improve the readiness posture of the Joint Chiefs of Staff.

For the WWMCCS ADP Joint Technical Support Activity (JTSA) which provides centralized technical automatic data processing support to the Joint Chiefs of Staff and the WWMCCS commands, we are requesting $17.9 million, a net increase of $5.6 million over fiscal year 1981. An increase for the price of goods and services is estimated at $1.7 million, while the remaining $3.9 million will provide increased standard system software development and maintenance support to the WWMCCS ADP community.

For the automatic data processing support of the NMCS, we are requesting $29.0 million, an increase of $1.8 million from fiscal year 1981. This includes $571 thousand to meet anticipated increases in the price of material and other goods and services. It also provides some program growth for ADP contract support to meet increased operational requirements of the Joint Chiefs of Staff, Office of the Secretary of Defense, and other Department of Defense activities for mission essential requirements.

To support WWMCCS System Engineering, we are requesting $10.0 million which is $3.8 million more than the fiscal year 1981 requirement. This program was established to provide overall system engineering for the WWMCCS, and is making significant contributions to an orderly progression toward the target WWMCCS. The increase of $371 thousand is for growth in the price of goods and services, while $3.4 million is for WWMCCS support of the Military Commanders in Chief (CINCs) and the establishment of a WWMCCS Information System Acquisition Office.

PROCUREMENT

The fiscal year 1982 Procurement request is $14.7 million. This amount includes $4.6 million for improvement of WWMCCS automatic data processing (ADP) systems which support the Joint Chiefs of Staff, the Office of the Secretary of Defense and the WWMCCS commands. Within the WWMCCS request is $4.1 million to upgrade the ADP systems of the National Military Command Center (NMCC) and its alternate and to increase the capacity and responsiveness of the processing and display systems. The WWMCCS ADP request also includes $0.5 million for the Joint Technical Support Activity (JTSA) to acquire ADP equipment necessary to continue providing responsive support to WWMCCS community generated requirements at a test bed facility for standard executive software.

The remainder of the Procurement request is $10.1 million for items less than $900 thousand each. This includes $4.8 million for Commanders in Chief Command and Control (CINC C^2) initiatives to provide theater commanders the ability to rapidly adapt to the changing operational environment, and to effect low cost, near-term enhancements to existing Command, Control and Communications Systems. To purchase ADP equipment for the DCA Hybrid Simulation Facility which supports system engineering activities of the Agency we are requesting $361 thousand. The remaining $4.94 million is requested for normal replacement and modification of equipment and systems used by DCA Headquarters and other communication activities.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION (RDT&E)

The FY 1982 RDT&E estimate is $136.9 million, which more than doubles the FY 1981 program. Of the $80.7 million total increase, $53.6 million is attributable to initiatives required to support the Enhanced Post-Attack WWMCCS program. The remaining increases are: $7.0 million for the WWMCCS ADP Joint Technical Support Activity, $3.9 million to modernize the WWMCCS Information System, $14.2 million to support other strategic programs and $2.0 million in our communications-oriented efforts.

WWMCCS Architecture, WWMCCS System Engineering, WWMCCS Information System, and CINC Command and Control Initiatives

The WWMCCS System Engineer manages the architectural development of the WWMCCS by identifying and assessing the capabilities needed to achieve a balanced and effective system. The WWMCCS System Engineer is also responsible for providing general system engineering for the WWMCCS; supporting the modernization of the WWMCCS Information System; and managing the newly created Command and Control Initiatives Program to support the Commanders of the Unified and Specified Commands. These efforts currently consist of five major activities, as described below:

The first and largest activity is the Enhanced Post-Attack WWMCCS Program which is directed toward developing options for improving the survivability and endurance of the WWMCCS commensurate with current and anticipated future threats. This program was, until recently, called the WWMCCS Survivability R&D Program; the name change reflects the broader scope which puts increased emphasis on enhancing the endurance of the WWMCCS in the post-attack timeframe. The WWMCCS System Engineer initiated this program in FY 1980 and provided options and recommended approaches to the WWMCCS Council for review and decision. Based on FY 1981 work, experimental developments in selected areas of command centers, communications, and surveillance and warning will be continued along with cost and risk reduction studies to support the acquisition of a survivable and endurable WWMCCS. The $68.5 million requested in FY 1982 for this program reflects the initiation of several prototype developmental efforts needed to support these studies.

The second activity supports the long-term technical planning, integration, and systems engineering efforts needed to incorporate selected capability improvements into the WWMCCS. It also provides the technical direction and recommended programming guidance for the Military Departments and Defense Agencies needed to assure an integrated, balanced implementation of those capabilities. The resulting recommendations are published in our annual planning documents for Command, Control and Communications (C^3) systems in support of theater nuclear forces, and other system performance specification documents. For this activity, we have requested $10.0 million.

The third activity supports the modernization program for the WWMCCS Information System (WIS) on which a progress report has been submitted to the Congress with the FY 1982 budget. The report provides the status of architectural and operational studies and recommends a new management arrangement intended to provide stronger centralized management and fiscal control over WIS modernization. This new management arrangement establishes a WWMCCS Information System Acquisition Management Office. Following a WWMCCS Council decision, this project will provide the overall system level specifications for the WIS and a continuing system engineering effort in conjunction with using commands. Additionally, the WWMCCS System Engineer is developing a WIS modernization plan for submission to the Congress with the FY 1983 budget. We have requested $8.2 million for these efforts.

The fourth activity involves management of the WWMCCS Architecture. This activity provides a continuing evaluation and overview of the performance characteristics of the WWMCCS in view of changes in the environment, threat, force structure, technology and U.S. defense policy. In turn, recommendations for conceptual system improvements and modifications in response to those changes are made to the WWMCCS Council. For FY 1982, we are requesting $1.2 million to continue this effort.

The fifth activity is the newly created CINC Command and Control Initiatives Program. In conjunction and coordination with the Office of the Joint Chiefs of Staff, the Defense Communications Agency has been designated financial manager for the CINC Command and Control Initiatives program. Funds will be budgeted annually to provide the CINCs with the capability to enhance their unique command and control systems in response to dynamic operational situations through low-cost, near-term improvements. We expect this program to result in significant improvements in readiness by virtue of the CINC's improved ability to exercise command and control over their forces. For this new program, we have requested $2.7 million for FY 1982.

National Military Command System

DCA is responsible for providing systems engineering and technical support for the National Military Command System (NMCS), the priority component of the WWMCCS designed to meet the command and control requirements of the National Command Authorities (NCA) and the Joint Chiefs of Staff (JCS). The NMCS is comprised of the National Military Command Center (NMCC), the Alternate National Military Command Center (ANMCC), and the National Emergency Airborne Command Post (NEACP). It includes the facilities, communications, procedures, and information processing equipment used to support the operation of these command centers. Our NMCS support includes system analysis, engineering, planning, and technical supervision of implementation, test and evaluation. The principal focus in this area is on the evaluation of existing capabilities, the identification of system deficiencies, and sound planning for evolutionary improvement of the system. In addition to NMCS support, this program manages the centralized development, deployment and operation of standardized user-oriented automated message handling systems within the Department of Defense (DoD).

In FY 1982, a total of $7.7 million is requested for the NMCS program, an increase of $3.0 million over FY 1981. The increase will support efforts relating to: integration of new generation WWMCCS ADP capabilities into the NMCS; development of requirements for a Command Center Processing and Display System; and increased development efforts on communications and information processing enhancements for the National Emergency Airborne Command Post (NEACP).

WWMCCS ADP Joint Technical Support Activity (JTSA)

The WWMCCS ADP-JTSA RDT&E effort provides centralized engineering support for the standard WWMCCS information processing system. This effort is required to maintain and enhance ADP information processing capabilities which are responsive to the needs of the National Command Authorities and other WWMCCS Command and Control users. All of the effort undertaken is supportive of, and consistent with, the upgraded capabilities now being planned under the WWMCCS System Engineering effort. The major thrusts of this effort include:

(1) Developing, implementing and evaluating networking techniques and capabilities to enhance the exchange of critical command and control information for both near-term and future WIS requirements. This effort will focus on transitioning the WWMCCS Intercomputer Network from its currently dedicated communications sub-network to the DoD common user AUTODIN II

network, developing a DoD standard interface device to connect host computers to AUTODIN II; and developing means which more effectively utilize networking capabilities as an essential element of the overall WIS.

(2) Identifying, and demonstrating ways to improve ADP support to the WWMCCS during crises. Candidate WWMCCS applications will be designed, implemented, demonstrated, and evaluated for their impact on the WWMCCS and their acceptance by WWMCCS operational users. This support was previously described and funded under the WWMCCS System Engineering program.

(3) Providing technical support to the WWMCCS Information System (WIS) Acquisition Manager in the form of transition planning, and identification of capabilities and functions required in the WIS hardware and software.

Of the $12.8 million requested in FY 1982, $5.9 million is to continue an effort funded under the WWMCCS System Engineer program at $3.5 million in FY 1981. The program increase of $3.1 million is required to support efforts associated with identifying and demonstrating ways to improve WWMCCS ADP support during crises, and conversion from the current WWMCCS ADP system to the successor WWMCCS Information System.

Minimum Essential Emergency Communications Network (MEECN)

The Minimum Essential Emergency Communications Network provides essential survivable communications between the National Command Authorities and U.S. strategic forces worldwide. The network consists of a confederation of specially designated, service funded and operated communications systems whose interfaces are engineered to be interoperable for MEECN purposes. The MEECN systems include diverse airborne, satellite, and terrestrial facilities employing virtually the entire radio frequency spectrum. The Defense Communications Agency is responsible for providing technical guidance to the Joint Chiefs of Staff and the services for integrated operation and future development of the multiple communications systems comprising the MEECN. This entails the planning, systems engineering, test and evaluation of the current MEECN and correction of deficiencies as necessary to insure an effective MEECN. Additionally, advanced communications technologies are examined for their potential application to the MEECN.

For FY 1982, $6.5 million is requested for this program. The increase of $3.0 million will provide the effort needed to improve the endurability of the MEECN to support the Enhanced Post-Attack WWMCCS objectives. The development and test activities for the Adaptive HF/VHF radio system is included as part of this effort.

Long Haul Communications

DCA is responsible for the operational direction, management, architecture and systems engineering of the Defense Communications System (DCS) and the Defense Satellite Communications System (DSCS). This includes establishment of an integrated architecture for an overall Defense Switched Network (DSN), as well as the top level architecture under which all military satellite communications systems are developed. The RDT&E included in this program element provides the basis for the essential follow-on subsystems work supported by the Services.

The DCS is the worldwide long-haul strategic communications system for the Department of Defense (DoD) and is the core of the DoD wartime non-tactical communications capability. It provides crisis and day-to-day communications, and specifically includes support for the WWMCCS. The efforts in this program element particularly emphasize the development of a DCS that is wartime endurable, capable of reacting to and operating well under a variety of crisis situations including war, and is still peacetime effective. This requires a capability to rapidly extend services to remote areas and to restore disrupted trunks. Central to this capability is the ability of the DCS to interoperate with the many service-managed base and tactical communications systems so as to achieve robust end-to-end service.

The major thrusts of the FY 1982 DCS program are directed toward removing deficiencies in its endurability, survivability and responsiveness; and improving its cost effectiveness. This program supports:

(1) Continuing expansion of our activities to develop and establish overall integrated architectures to guide the future of all DoD communications, as directed by the Assistant Secretary of Defense for Communications, Command, Control and Intelligence. This includes the Worldwide Secure Voice Architecture which is oriented towards correcting the current deficiencies for secure voice service, and the Integrated AUTODIN System Architecture which is oriented towards providing reliable and responsive computer-to-computer data communications for the WWMCCS community as well as other DoD users. We have also accepted an additional task during the past year to initiate the near-term development of a Defense Switched Network (DSN). The DSN architecture and implementation program will encompass a consolidation of all DoD base, camp, and station communications (AUTOVON and other) with the long-haul capabilities, with the goal of offsetting the serious cost impacts of recent tariff actions such as the demise of telpak tarriffs.

(2) Implementation of numerous improvements to correct deficiencies and to enhance the overall endurability of communications for critical C^2 users throughout the spectrum of crisis-wartime scenarios envisioned for the 1980's. In addition to programs aimed at mitigating the physical vulnerabilities of our facilities and improving the jamming resistance of our communications, we are also aiming at improving the overall system control capabilities of all our systems to allow for interoperability with, and a more effective use of, commercial and allied capabilities to enhance the restoral, reconstitution, and extension of DoD communication during conflicts.

(3) Continuing efforts by the Military Satellite Office to develop an overall DoD satellite architecture that will satisfy the priority needs of the four military services through the 1980's to the year 2000. This current effort has resulted in active joint participation by the four military services, the Office of the Joint Chiefs of Staff, the Department of Defense, at the senior executive as well as all working levels, to achieve a unified architectural development and systems implementation plan.

The FY 1982 request for this program element is $19.6 million of which $2.5 million is for the Military Satellite Office, and $1 million is for support of the initiatives required under Presidential Directive-53 to increase survivability of national telecommunications assets. System engineering RDT&E expenditures in the above areas, although relatively small, will continue to exert high leverage on the effectiveness of future expenditures by the military departments in support of the DCS and Military Satellite Communications.

CONCLUSION

Mr. Chairman, this concludes my prepared statement. I am ready to respond to your questions.

HIGHLIGHT OF REMARKS

General HILSMAN. I would like to highlight, if I could in my remarks, the crux of the issues that I face in three broad areas. One, is long haul communications. Second, is the role that I have as the systems engineer for the Worldwide Military Command and Control System. And third, is the support of our national telecommunications system.

LONG HAUL COMMUNICATIONS

In the area of long haul communications I am the manager of the Defense Communications System. That means I do the engineering for that long haul system. The services actually buy the equipment and operate the equipment. So my role is strictly in the area of engineering. In that role I would like to highlight, if I could, four significant issues.

One is a keen awareness by everybody that without communications we simply cannot control our worldwide forces that we have, and so communications is a major issue to us as we project ourselves anywhere we go.

Second, we no longer have the problem only of connecting people by telephone and by teletype, but we have, now, large computers, that we were just talking about, all over the Nation and we have to connect them with our communications systems. The current communications systems really do not do that very well. This requires a different kind of technology that we have to go into. I announced yesterday a cutover of a program that we have been working on for 4 years, Autodin II. It is ready to go now and we will start bringing subscribers on the system so we can start taking care of the users that we service.

The third area, and the most crying need that I hear from commanders no matter where I travel around the world, is: "Give me secure voice so that I can talk secure." You will see items in our budget this year that are trying to meet that need.

The fourth is satellite communications. The potential for satellite communications is still quite vast. I think there are two challenges: one, to be sure that we understand what we are doing with this technology because it is coming so fast. You probably read an FCC ruling of about a month ago where in 1984 you will be able to buy a television antenna for your house that will bring you direct satellite transmissions. That tells you that terminals are going to be cheaper and that the satellites themselves are going to be cheaper to us. You are going to see in our budget this year a program that brings together our requirements and does it in an affordable way.

WORLDWIDE MILITARY COMMAND AND CONTROL SYSTEM (WWMCCS)

The second program that I will briefly discuss is the Worldwide Military Command and Control System (WWMCCS) systems engineering program. There are two big areas in this program.

One of these is in that same area you were just talking about. We have 35 WWMCCS ADP systems in 26 different sites around the world that are doing the command and control function for the commanders in chief no matter where they are. The GAO, the Congress, everybody has said "You have an antiquated system out there that is not doing the job." They were put out there in the early 1970's. We were directed by the Congress to provide a plan last month to upgrade that system. This is a 10-year program that will cost us over $1 billion. The first of those dollars are reflected in the budget that we are addressing today.

The second major issue WWMCCS is a issue in post-attack: how does this Nation survive in a command control way after a nuclear attack, if we should have one? There is about a $60 million increase in the budget in two principal areas. One is a reconstitutable satellite capability that we could put up from a mobile platform quickly and second, a mobile command post in a truck that would have the required communications equipment.

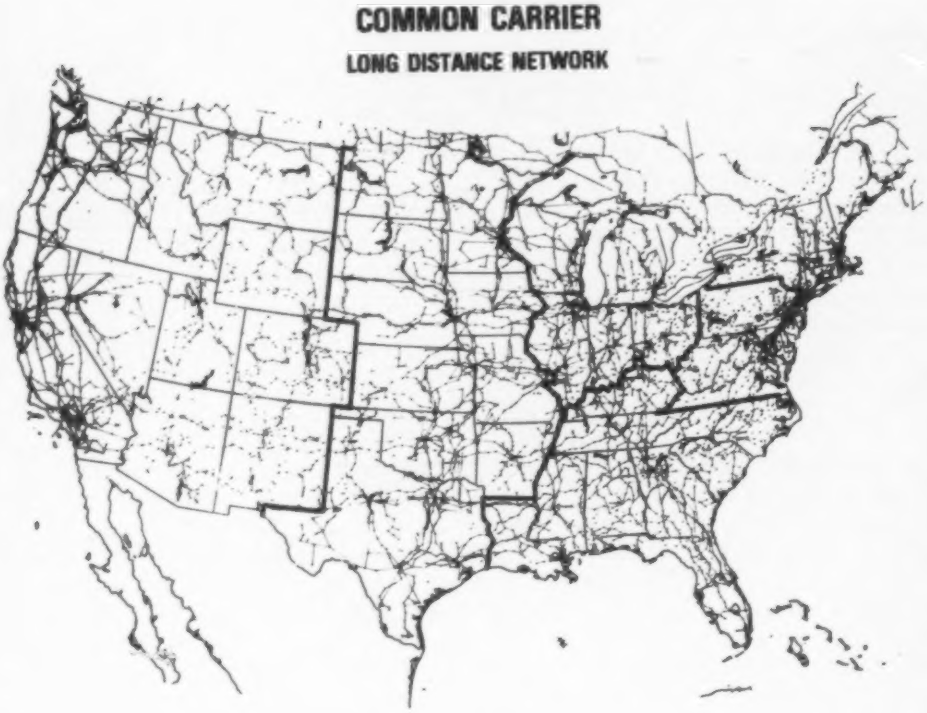
NATIONAL COMMUNICATIONS SYSTEM

The third issue that I would like to talk about today is the role that I play as the manager of the National Communications System. With this mission I head a loose confederation of all the communicators of the Government: Department of State, Commerce, and so forth. Whereas overseas 50 percent of the communications that we, the U.S. forces, use are ours that we own and operate with our own service people, whereas in the United States 95 percent of what we use is owned by the common carriers, the A.T. & T.'s and the G.T. & E.'s.

Let's look at just one aspect of this, everything that we have go for our NATO mission really is focused in an area of central Europe which is as big as the State of Oregon. Here in the United States if we have to take care of any kind of a problem that we might have in terms of natural disaster or in terms of a nuclear attack, we have the total size of the United States and it is basically the common carrier network upon which we must rely. So, I am concerned about the common carrier problems in the United States, not only in terms of a nuclear attack but in terms of earthquake or other natural disasters. A few years ago A.T. & T. used to take care of that problem. They used to bury the cables. They put control centers underground. They shock-mounted the equipment. They quit doing that about 5 or 6 years ago. So we now have a problem that we have to address, and we have been for the last year, of how do we have a survivable communications system in the Nation if we need one for natural disasters or some kind of nuclear attack.

You may have read an article in the Washington Post a few months back that quoted a recent study. It said if we lost 20 major communications sites in this Nation, our entire telephone system would shut down. That is about accurate. It would because we stopped worrying about how to take care of that problem. We have been working the problem as I said for the last year now under a direction from the White House, Presidential Directive 53. We think we know how to take care of that.

This is an area where I really need your help. I will ask Lieutenant Dixon to show you 3 charts very quickly. I would like to talk to those and tell you what Presidential Directive 53 is about.

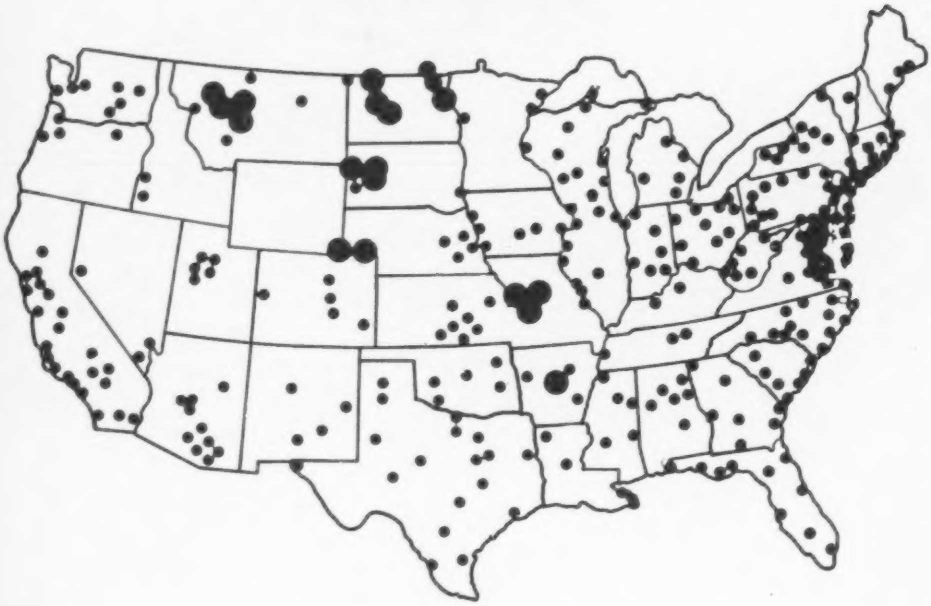

COMMON CARRIER
LONG DISTANCE NETWORK

[CHART 1]

NATIONWIDE TELEPHONE AND TELEGRAPH LINES

This is sort of a map of the United States. Going across there are all of those long lines of telephone and teletype communications that we have.

NUCLEAR ATTACK SCENARIO

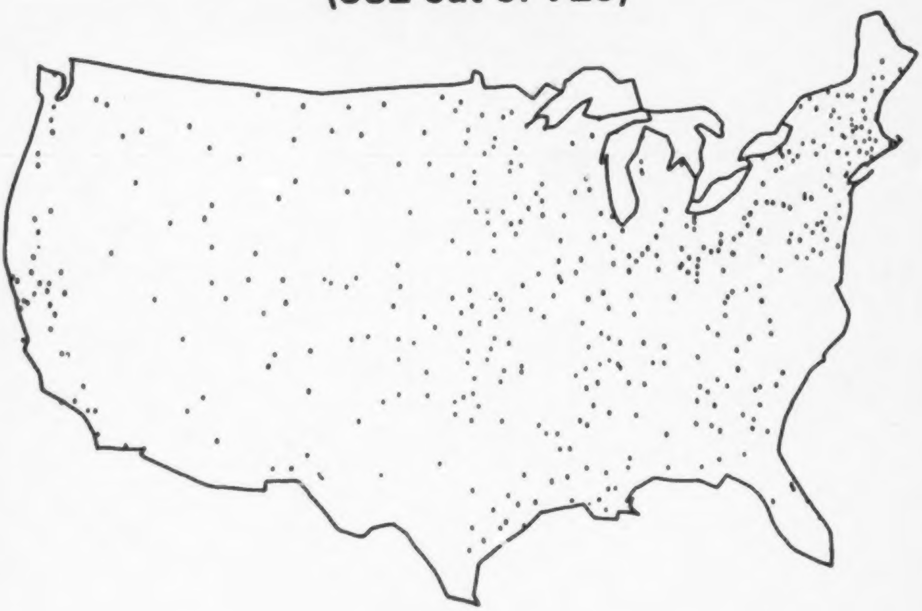


[Chart 2]

NUCLEAR ATTACK POTENTIAL

On the second chart I have shown the results of a potential nuclear attack. You might suspect, as that study said, that we lose our major connectivity centers.

SURVIVING BELL SYSTEM CLASS 4 OFFICES
(532 out of 725)



[Chart 3]

SURVIVING OFFICES

If there could be any kind of good news to come out of all of that, the third chart says all of the dots that you see there would be left. All of those centers would be left. They are not interconnected today. We have not planned to do that. Through Presidential Directive 53, and the budget submission that we are making to you, we know how to do that.

Senator **Rudman**. Are you relying more and more on microwave now?

General **Hilsman**. We rely on everything. All of this includes cable, microwave and now satellites as well. In fact most of the connectivity that we would add to this, with Presidential Directive 53 behind this, is microwave links going in different directions.

So that is the area where I need help. In my fiscal year 1981 supplemental request for R.D.T. & E. funds you supported the request. The House however denied the request without prejudice and the conferees concurred with that denial. I believe we know how to do the job but I need your support for Presidential Directive 53.

Senator **Rudman**. What was the funding level?

Mr. **Fritz**. The supplement was $4.1 million in R.D.T. & E.

General **Hilsman**. In the 1982 budget it is $15 million in all appropriations. The issue is really bigger than just communications. All of the other services of this Nation, medical, food, whatever it is, really need a communications system around for support.

As we have started to get the imput from the earthquake disaster in Italy, we have learned that if they could have had the communications to know what was happening, they then would have been able to respond. However, they never had it. They did not have a very good communications system to start with, and we really do have a very good one to start with.

So that is where I really need some help because that is a new area that we have not worked. It is appearing new. That is the crux of my comments, sir. The additional dollars are in support and recognition of the fundamental need to have a command and control system to support this Nation.

If you want to look at the differences between 1981 and 1982, we are showing a $40 million delta increase in O. & M. Basically the majority of that is caught up in improving these national communications systems that I have talked about. There is one classified program in there. You asked whether we needed a closed hearing. If you need to talk about that $10 million program, I would ask to close the hearing because it is very sensitive.

Senator RUDMAN. I think we are aware of what this is. If we do have any questions on it we will submit them to you.

General HILSMAN. The major increase in the R.D.T. & E. is the other area that I mentioned; $60 million of that is getting that reconstitutable satellite put up from a mobile platform and a command post through which the President would conduct Government functions.

Do you have any questions?

END-STRENGTH REQUIREMENTS

Senator RUDMAN. One question is that your end strength for your agency is about 50/50. What drives the requirements for additional military billets? If civilian end strength ceilings were increased, could some of the military billets be converted to civilian spaces?

General HILSMAN. The figure is a little skewed, Senator, because in my end strength I have the White House Communications Agency. That is 520 people; 518 of which are military. They are soldiers that operate switchboards, Wherever the President goes, they go as a fast reaction force. If you take them away, I am not at that 50/50.

I kind of like the balance that I have now because I do not really have a lot of military when you take that White House group away, but I have enough to sort of keep the operational flavor in.

Senator RUDMAN. We just wondered about the ratio itself. The staff had a question about that.

AGENCY WORKLOAD

One of the interesting numbers to look at as your agency contrasts with some of the others is that you seem to have a relatively stable workload, at least based on your figures. The funding levels for the agency increase at the rate of about 20 percent a year. Aside from the inflationary impact, how have you managed to assume accelerated program growth with only marginal improvements to end strength and with no apparent workload fluctuations? Does that have something to do with the kind of technology you are into now?

General HILSMAN. I almost wish that would continue, but as we are starting to see in the next year it is not.

Over the last few years we have been in the planning phase of doing the modernization. There are about five big areas that we have had to do the planning in, and that has taken about 4 or 5 years to do. So as we do the planning, we stay relatively stable.

We are now moving into execution, and as we move into execution you are going to see that change just a bit because you need more dollars to buy the items in quantity.

In fact I sent my fiscal year 1983 POM request in asking for some more people just for the reasons I told you. I am planning to field more equipment in the next few years.

Senator RUDMAN. General Hilsman, I think that is all we have this morning. We will pay particular attention to the request you made here specifically today and we will look at that closely.

General HILSMAN. I appreciate that. Thank you.

Defense Mapping Agency

STATEMENT OF BRIG. GEN. DONALD O. ALDRIDGE, U.S. AIR FORCE, DEPUTY DIRECTOR, DEFENSE MAPPING AGENCY

ACCOMPANINED BY:

LAWRENCE F. AYERS, DEPUTY DIRECTOR, PROGRAMS, PRODUCTION AND OPERATIONS, DEFENSE MAPPING AGENCY

DR. ARMANDO MANCINI, DEPUTY DIRECTOR FOR SYSTEMS AND TECHNIQUES, DEFENSE MAPPING AGENCY

ALBERT N. RHODES, DEPTY COMPTROLLER, DEFENSE MAPPING AGENCY

INTRODUCTION OF WITNESSES

Senator RUDMAN. The next witness will be Brig. Gen. Donald O. Aldridge, Air Force, Deputy Director, Defense Mapping Agency.

Good morning, General.

General ALDRIDGE. Good morning, Senator. With me this morning is the Deputy Comptroller for the DMA, Mr. Rhodes; Mr. Ayers, our Director of Programs, Production and Operations; and Dr. Mancini our Director of Systems and Techniques.

Senator RUDMAN. All right.

PREPARED STATEMENT

Your entire statement will be incorporated in the record and you may summarize in any way that you think will be most meaningful for the committee.

General ALDRIDGE. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF BRIG. GEN. DONALD O. ALDRIDGE, USAF

DEPUTY DIRECTOR

DEFENSE MAPPING AGENCY

Mr. Chairman and Members of the Committee:

I welcome this opportunity to present the Defense Mapping Agency's (DMA) budget request for fiscal year 1982, including adjustments resulting from the proposed program supplemental for fiscal year 1981 and the amendment for fiscal year 1982.

INTRODUCTION

The need for mapping, charting, and geodesy (MC&G) production continues at a high level. Our products support the military planners, the flight crew, the missile enroute to a target, the combat soldier in the field, the marine aboard ship, and the seaman on station armed with nuclear missiles. Wherever our servicemen are stationed or whatever their duties, they require MC&G support in the performance of their mission. Additionally, DMA has a related statutory responsibility to support the civil maritime community with up-to-date and adequate navigational materials. We also have worked with NASA since the beginning of the space program. In fact, Astronauts Young and Crippen used DMA-produced star charts and unique maps during the flight and landing of the Space Shuttle Columbia.

DMA PRODUCTION FACILITIES

DMA has two principal production facilities providing MC&G products, data, and services to the Armed Forces. The first of these, the DMA Aerospace Center in St. Louis, Missouri, provides aeronautical charts, air target materials, digital data, point positioning data bases, flight information publications, space mission charts, and a wide spectrum of technical data relevant to the earth and its aerospace environment essential to navigation and missilery. Most of this production supports manned and unmanned aerospace weapons. The field office at Kansas City, Missouri, supplements the St. Louis facility in this production.

The other major production center is the DMA Hydrographic/Topographic Center at Brookmont, Maryland. Its production includes hydrographic charts and related data for surface and subsurface navigation, topographic maps for land forces, Digital Terrain Elevation Data for the cruise missile, as well as some products for air operations. Augmenting this center's production are field offices at San Antonio, Texas, Providence, Rhode Island, and Louisville, Kentucky.

OTHER DMA ACTIVITIES

Another DMA activity, the Inter American Geodetic Survey (IAGS) founded in 1946, assists Latin American cartographic agencies in performing surveys and producing maps and charts under mutually beneficial cooperative agreements. The Defense Mapping School at Fort Belvoir, Virginia, trains members of the Armed Forces, other government agencies, and our allies in the use and production of MC&G products. The DMA Office of Distribution Services at Brookmont, Maryland, provides DMA products and services to all users, and has twelve subunits in various locations around the world.

To utilize other sources of MC&G information and products, we work closely with the U. S. Geological Survey, the National Ocean Survey, and 80 other nations with whom exchange agreements have been negotiated.

PRODUCTION PRIORITIES

Today, our production is limited to those products critical to near term military requirements. Our first priority is support of the strategic nuclear force, including the various cruise missile programs, and to providing products that are critical to safety of flight and navigation at sea. Our second priority is to support tactical forces. This effort is concentrated on meeting the requirements of the Rapid Deployment Force and tactical weapons such as PERSHING II and FIREFINDER. Because of the overwhelming need to support production requirements in these categories, there is very little capacity available for other requirements which have been deferred, considering levels of prudent risk. To meet the critical production schedules, much of our work force is on a three-shift, six- to seven-day week.

PRODUCTION OPERATIONS AND PROGRAMS

Our job would be easier and less costly if it were simply a matter of the one-time development of a given product for a specific purpose in a particular geographic area. However, it is not that simple because man is constantly changing both the earth's surface and its cultural features. Consequently, much of our production effort must be directed toward maintaining the accuracy and currency of our products. This encompasses the immediate issuance of correction notices to users when new information critical to safe navigation is received and the revision, recompilation, printing, and distribution of corrected products. Maintenance, of course, is not our only concern--new and improved operational weapons systems with increased accuracies, faster speeds, longer ranges, better penetration capabilities, and more sophisticated guidance systems have required changes and improvements in MC&G data commensurate with the advances in hardware technologies. Much of the change involves the use of digital cartographic products for purposes which cannot be satisfied by conventional paper graphics.

In recent years, there has been a veritable explosion in the use of digital data for user applications, as well as for in-house production processes. Increasingly, our products are for use directly by computers in new weapons systems and simulators. This imposes strict quality constraints on the data we produce. Products that are tailored for machine use in systems such as the cruise missile must be produced to close tolerances which leave little room for compromise with MC&G accuracies. The digital data to meet these requirements are produced by highly skilled technicians using complex, state-of-the-art stereocompilation equipment, supported by a large volume data processing capability. Unfortunately, the advent of new, high priority requirements for digital data, principally for strategic systems, has not been accompanied by a reduction in the requirements to support general purpose forces with conventional products. In fact, the need for contingency products in some of the more remote areas of the world has become more urgent.

CRUISE MISSILE SUPPORT

We are on schedule with production of digital data for the nuclear cruise missiles: air, sea, and ground launched. The first production phase is the Digital Terrain Elevation Data (DTED), used for missile route penetration planning to the target. The second, Terrain Contour Matching (TERCOM) data, is similar to DTED but much more detailed for missile guidance. It is produced for selected areas and is used in the missile's on-board computer to update the inertial guidance system to assure accurate penetration to the target. The third, Vertical Obstruction Data (VOD), is needed for low level penetration of air defenses. The production of the first two phases is on schedule. Both final requirements and production techniques for Vertical Obstruction Data are continuing to be refined with full production scheduled to start this spring.

RAPID DEPLOYMENT FORCE

When the decision was made in early 1980 to establish the Rapid Deployment Force, requirements were levied on the Agency to accelerate the production of products for areas of the world which had not been previously identified as high priority to the United States' strategic interests. Consequently, DMA had not scheduled products in those areas for production in the near term.

RDF requirements have now been fully identified and consist of approximately 5,800 map and chart products and 930,000 square nautical miles of point positioning data bases (PPDB). First-time coverage is required for many areas and existing products need updating for currency and accuracy. DMA has programmed production and maintenance of about 4,000 of the products and the entire PPDB requirement. The work involves using specialized source material to produce large scale maps and charts for contingency operations. The Department of Military Survey, United Kingdom, is providing assistance in meeting our total objective which should permit this Agency to have all products produced and into distribution by the end of FY 1986. Distribution plans have been developed and are being implemented.

The Rapid Deployment Force requirements focus on the Persian Gulf Region, whereas those for cruise missile currently focus on the USSR; thus, we now find ourselves in the position of simultaneously producing charts for both areas to meet urgent needs.

TOTAL DMA FUNDING REQUEST

I now will talk about our funding request for fiscal year 1982. In the aggregate for O&M, Procurement, RDT&E, and equivalent Military Personnel expenses, we are requesting $371 million. This is a net increase of $7.9 million over the current fiscal year 1981 request of $363.1 million. The increase includes $2.6 million for statutory pay increases and $8.5 million for cost escalation. The result is a net decrease of $3.2 million related to program growth. Program growth of $10.0 million in O&M and $4.8 million in RDT&E are offset by a reduction of $18.0 million in Procurement. The decrease in Procurement is directly related to the fact that the majority of the equipment needed to support increased production of maps and charts for the Rapid Deployment Force and cruise missiles was purchased in previous fiscal years. Details of the net program changes are contained in our justification materials; accordingly, I will discuss only the more significant changes within each appropriation.

OPERATION AND MAINTENANCE

For the Operation and Maintenance appropriation, we are requesting $326.1 million for fiscal year 1982--an increase over fiscal year 1981 of $19.7 million. Of this amount, $2.6 million is for statutory pay increases and $7.1 million is for inflation. The remaining net increase of $10.0 million is detailed by line item on our Schedule of Increases and Decreases. Major increases are: $2.8 million, including 83 workyears, to meet the Rapid Deployment Force requirements; $1.0 million for a classified project; $1.8 million to upgrade scientific computers to meet production workloads; $1.0 million in base operations primarily for real property maintenance and repair; $3.5 million to revise, optimize, and standardize computer programs that support production; and, $900 thousand for increased support of field survey team efforts related to the MX test and evaluation program.

The foregoing increases are partially offset by other relatively minor adjustments which total to a reduction of $1.0 million.

PROCUREMENT

For the Procurement appropriation, we are requesting $8.3 million for fiscal year 1982. This is a net decrease of $17.6 million from fiscal year 1981 and is composed of an increase of $500 thousand for inflation and a program decrease of $18.1 million. The fiscal year 1982 request shows a significant decrease partly because equipment needed to support the production of maps and charts for the Rapid Deployment Force and to support cruise missile production requirements was procured in prior fiscal years.

The fiscal year 1982 requested amounts are to support the overall DMA mission as opposed to any of the above unique requirements. We intend to use fiscal year 1982 funds for equipment to produce MC&G data which are integral parts of advanced strategic and tactical weapon systems and other products that support military land, sea, and air operations as well as contingency plans. For example, $3.0 million of the fiscal year 1982 request is for cartographic equipment. Most of these funds, $2.5 million to be exact, are requested to purchase 19 Computer Assisted Photo Interpretation (CAPI) systems. The CAPI systems will be used to help meet Air Force and Navy requirements for 19 million square miles of digital data supporting radar scope simulation in weapon system trainers and will increase workforce productivity in that area. In addition, $1.6 million is for replacement of items which have exceeded their useful life.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

For the Research, Development, Test and Evaluation (RDT&E) appropriation, we are requesting $25.9 million for fiscal year 1982, an increase of $5.7 million over fiscal year 1981. This represents an increase of $4.8 million for program requirements and $.9 million for inflation. The major portion of this increase is required to provide essential geodetic and geophysical support for the MX missile system. The basic purpose of the DMA RDT&E program is to increase MC&G productivity through the use of an expanding digital production technology. The achievement of this productivity is critical to our continuing ability to satisfy increasing and more stringent MC&G requirements in support of DoD weapons systems such as MX, TRIDENT, PERSHING II, and cruise missile systems. Today, DMA's mapping production system uses a combination of analog, digital, and supporting data as our primary means to provide the necessary MC&G products and services. Currently, we have been able to automate the mapping functions to a limited extent. During the mid 1990s, we will see the culmination of efforts providing DMA with virtually a total digital production system. Our efforts during fiscal year 1982 and the rest of the 1980s will continue to be directed toward this objective with developments in technology areas such as advanced feature analysis, stereoscopic reconstruction, data base mass storage, data base management, and wideband communications. We will also continue the expansion of automation technology in production areas that are labor intensive. DMA envisions being in a total digital production posture by the mid 1990s. If the technology evolves, this objective will be realized. DMA has and will continue to devote a major portion of its R&D resources toward the development of a total digital production capability. This capability is critical for increasing MC&G productivity necessary to meet projected DoD needs.

SUMMARY

In summary, Mr. Chairman, the fiscal year 1982 budget request totalling $371 million will enable DMA to meet the most urgent and higher priority requirements of our Armed Forces for MC&G data, products, and services. In meeting these requirements, DMA will continue its efforts to make this a cost effective contribution to improved force readiness.

Thank you, Mr. Chairman. We will be happy to respond to your questions.

MC&G SUPPORT

General **Aldridge**. Obviously, you are well aware that the need for mapping, charting, and geodesy production of products continues at a high level. Perhaps it is not well appreciated by many that in the digital data area we are at the point where our data is an integral and essential part of many of the newer weapon systems. We also have to continue production of the classic maps and charts. Wherever military forces are stationed they do require M. C. & G. support.

We do not do all of this. We also get this type of information from sources such as the U.S. Geological Survey, National Ocean Survey, and actually more than 80 other nations with whom we have cooperative agreements. In fact, the last week in June the retiring director signed a cooperative agreement with Egypt while I was in Buenos Aires signing one for aeronautical chart information with the Argentine Air Force.

PRODUCTION PRIORITIES

Today our production is basically limited to those products that are absolutely critical to the near term requirements with the first priority being the strategic nuclear force, including the nuclear armed cruise missles, and to provide both sea and air safety.

The second priority is the tactical forces. this has been concentrated on supporting NATO, Rapid Deployment Force, and tactical weapons such as Pershing II and Firefinder. To meet these critical production schedules our work force is basically on three shifts, a 6 or 7 day schedule. It varies from department to department.

To highlight some of our high priority projects, in the area of cruise missile support, we are on schedule with the production of digital data for the nuclear cruise missiles whether it be air, sea, or ground launched. However, I must tell you that to support the conventional armed cruise missile program requirements we will need additional resources in the following years.

Regarding the Rapid Deployment Force, when the decision was made in early 1980 to establish the RDF, the requirement was levied on us to accelerate the production of products to support that. Unfortunately, heretofore, it was in an area of the world, that is, it was not in central Europe or Korea, which did not have a high priority to United States strategic interests. Therefore the products simply did not carry a high enough priority to be produced. So essentially what we are doing is starting from scratch there.

Their requirements have now been fully identified and consist of about 5,800 map and chart products and about 930,000 square nautical miles of point positioning data bases. First-time coverage is required for many of the areas and the products of the areas that do exist, whether they were done by us or by some other country, need updating for currency and accuracy. We are going to do about 4,000 of those 5,800 products within DMA and we will do all of the point positioning data base requirements. The collaborating countries are also providing some assistance.

The bottom line is that we think all the products will be produced and into distribution by the end of fiscal year 1986.

SUMMARY OF REQUESTED FUNDING

What we are asking for today is O. & M. in the amount of $326.1 million, an increase $19.7 million over last year, with $2.6 million for statutory pay increases and $7.1 million for inflation. There are some major program increases: $2.8 million for RDF, $1.0 million for a classified project, $1.8 million to upgrade some scientific computers to meet production workloads, $1.0 million for some real property maintenance and repairs, $1.5 million for MX survey support and finally $3.5 million to increase efficiency by updating, standardizing and optimizing some scientific computer software programs.

In procurement we are requesting $8.3 million. This is a decrease of $17.6 million from last year. The reason last year was so high is because of our gearing up to support the RDF and adding to our capability to support cruise missile production.

In R.D.T. & E. we are requesting $25.9 million which is an increase of $5.7 million over 1981. It is an increase of $4.8 million for program requirements and $.9 million for inflation. The major portion of this is required to provide the essential geodetic and geophysical support for the MX missile program.

So in summary our budget request is $371 million. That will only meet the higher priority requirements of the military services.

MX SURVEY SUPPORT

Senator Rudman. There is a small item in here: $1.5 million for MX survey support in preparation of flight tests. It is planned for contractor services, helicopter rental and operations and so forth. Are your military helicopter operations so very much constrained or limited to preclude any interservice cooperation for that?

General Aldridge. We do use some. We have support out of Holloman and we have support of some SAC helicopters.

There are two points that we have to consider. First all military support is on an as-available basis. It is a little difficult to schedule the work force that way. Second, we have to make some minor modifications to the helicopters themselves to install inertial positioning systems equipment required to accomplish the survey work.

So while we do use the military resources that are available, the difference in cost—when we use the military we have to reimburse them also—for contract is about $1,400 a day and for military it is about $1,100 plus. So there is not a significant amount of difference plus, by utilizing contractors we can schedule the entire work force which increases productivity. We will continue to use military where we can in an economical way.

COMPUTER SOFTWARE SUPPORT

Senator **RUDMAN**. You are providing for contractual support of computer software to improve current operations. Does the increase of $3.2 million represent a one-time cost? Or will contractor support services be retained continually for this initiative?

General **ALDRIDGE**. It is basically a one-time cost. It is the result of our experience before where we were able to increase our efficiency and output drastically. I would like Mr. Ayers to answer that in more detail.

Mr. **AYERS**. Yes, sir, initially we think it is a one-time surge as we have defined the specific program. But, we recognize that with the high inventory of software and the new technologies that are coming out in the software area and the skills and knowledges that are available to us in the industrial market, we plan to utilize and capitalize on that because we have already seen some significant production improvements by using this new software.

A classic example is when we take what we call a cell of terrain elevation, a 60 by 60 mile area that has an elevation point every 300 feet. The operator that has created that from the photography goes through 15 different batch processing steps. He goes down to the computer, runs it though, gets the work back, looks at it. If it is not right then he does it again. If it is right he moves to the second step.

We are going to interactive software where the operator has a terminal on line in real time at his disposal. We will be able to get a quantum jump on our productivity in that we will not have people in the production line waiting and queuing up on the computer but the computer is serving them. It is this type of software that will enable us to move from batch to the interactive software mode.

So in short we have defined a one-time effort right now, but we know that we will be continuing this through the time frame of using contractor type support.

COMPUTERIZED RECONSTRUCTION OF DATA

Senator **RUDMAN**. Are you pretty much on line at this point with computerized reconstruction of the data that you are putting in?

Mr. **AYERS**. No, sir, we are in a transition.

Senator **RUDMAN**. You are still manual to some extent.

Mr. **AYERS**. Yes; we do a lot of checking digits manually from print outs. We are batch processing on the main frame. We have bought minicomputers on line in dedicated areas but we are now moving to the remote terminals and trying to capitalize where large processing and central processors offers us an advantage. Where we have a dedicated processing, there are certain parts of the manufacturing process that we do the same thing many, many times and it is much more advantageous to put in a dedicated computer.

We are linking these together so that rather than grab a tape and walk down to the large computer, we can pass the data through links to a data bank computer to be checked and stored. We are in the infancy of linking computers but we have laid out a program to go that way and we are starting with our large inventory of batch processing software and picking the programs that we see the big payoff of getting to on line interaction. I gave you one example.

COOPERATION WITH OTHER AGENCIES

Senator RUDMAN. Does your agency in any way cooperate on a technical basis with some of the data from some of our other agencies that are classified?

General ALDRIDGE. There is heavy interaction.

Senator RUDMAN. Obviously, they have some very interesting techniques. I am thinking of computer programs. So you do not have to reinvent the wheel.

Mr. AYERS. We have a cooperative agreement on that.

Senator RUDMAN. So you do have close liaison in the sense that they come up with particularly some of the digital reconstruction that they use in computers so you are able to use some of that same programing which essentially is a matter of scale more than anything else.

Mr. AYERS. We have our scientists working together.

General ALDRIDGE. We actually have people in those agencies working alongside them.

Senator RUDMAN. Thank you very much, General. I appreciate the testimony.

General ALDRIDGE. We have a chart to show you on production in support of RDF but it is classified.

Senator RUDMAN. All right.

DEFENSE NUCLEAR AGENCY

STATEMENT OF LT. GEN. HARRY A. GRIFFITH, U.S. ARMY, DIRECTOR, DEFENSE NUCLEAR AGENCY

ACCOMPANIED BY:

DR. EDWARD E. CONRAD, DEPUTY DIRECTOR, SCIENCE AND TECHNOLOGY, DEFENSE NUCLEAR AGENCY

PAUL H. CAREW, COMPTROLLER, DEFENSE NUCLEAR AGENCY

PREPARED STATEMENT

Senator **RUDMAN**. The next witness is Lt. Gen. Harry A. Griffith, United States Army, Director of the Defense Nuclear Agency.

General **GRIFFITH**. Good morning, Senator.

Senator **RUDMAN**. Good morning, General.

If you would like to proceed to summarize, your prepared statement of course is being incorporated in the record.

[The statement follows:]

PREPARED STATEMENT OF LT. GEN. HARRY A. GRIFFITH, USA
DIRECTOR
DEFENSE NUCLEAR AGENCY

Mr. Chairman and Members of the Committee:

I am Lieutenant General Harry Griffith, Director of the Defense Nuclear Agency (DNA). I am happy to testify today on behalf of the Agency's Fiscal Year 1982 budget request. I will review for you DNA's missions and summarize our total budget request. Then I will highlight our recent accomplishments and planned activities for the coming year in the areas of (1) research, development, test and evaluation (RDT&E); (2) operation and maintenance (O&M); and (3) procurement.

DNA'S MISSIONS

The Defense Nuclear Agency is responsible within the Department of Defense (DoD) for a wide range of functions related to nuclear weapons. In particular, DNA is the principal agency within the DoD for research, development and testing in the area of nuclear weapons effects. We develop weapons effects simulators and conduct all underground nuclear weapons effects tests for the DoD. In carrying out this broad mission, DNA maintains close liaison with each of the military services, other federal agencies and the Office of the Secretary of Defense (OSD) to ensure that our research meets both present and projected weapon system requirements and intelligence needs. We are, of course, at the service of the Congress and the Executive Branch as well.

DNA's RDT&E programs provide data on the effectiveness of nuclear weapons (ours and those of potential enemies); nuclear vulnerability and hardening information for systems, forces, and critical military targets; methodology for nuclear weapons targeting; improvements in the survivability of our theater nuclear forces; research into physical security of nuclear weapons; biomedical data on nuclear weapons effects; and so forth.

In the area of operations and support, DNA performs numerous functions related to nuclear weapons; we inspect nuclear-capable units of all Services; formulate nuclear weapons accident procedures and training doctrine as well as conduct major exercises; provide support to comprehensive test ban negotiations; take the lead in developing a DoD Overseas Nuclear Emergency Search Team (ONEST) capability; administer the facilities on Johnston Atoll; oversee, with the Department of Energy (DoE), the national atmospheric nuclear test readiness program under SAFEGUARD C to a Limited Test Ban Treaty; manage the US nuclear weapons stockpile; coordinate with Military Departments in establishing nuclear weapons safety rules; and carry out numerous other activities related to nuclear weapons.

Finally, DNA's role in nuclear weapon security and counternuclear terrorism crosses both operational and RDT&E areas. We assist in assuring that the physical security, intelligence, and special operations communities integrate their effort in protection of US nuclear weapons worldwide. DNA manages the exploratory development of DoD physical security systems to assist in integration of the overall DoD physical security RDT&E program.

Some of the exploratory development is devoted to supporting counterterrorism RDT&E projects. Operational support of specified national counterterrorism programs includes establishment of this nation's overseas ONEST program and maintenance of continuous capability to conduct an emergency US nuclear stockpile verification. DNA provides nuclear effects input to the Federal Emergency Management Agency (FEMA) and maintains a close technical exchange relationship with DOE and Nuclear Regulatory Commission (NRC). DNA is the proponent for DOD nuclear weapon security criteria.

SUMMARY OF DNA'S BUDGET

The Defense Nuclear Agency's budget request for FY 1982 is $338,078,000 as shown in Table I.

TABLE I
Defense Nuclear Agency Budget
(Dollars in Thousands)

Appropriation	FY 1980	FY 1981	FY 1982
Research, Developmnet, Test and Evaluation	179,150	201,771	302,078
Operation and Maintenance	28,935	30,208	33,570
Procurement	832	1,605	1,930
Military Construction	--	--	500
Total DNA	208,917	233,584	338,078

For FY 1982, RDT&E accounts for 89 percent of the total budget request; O&M for 10 percent; and Procurement and Military Construction for one percent.

RESEARCH, DEVELOPMENT, TEST & EVALUATION

DNA's RDT&E projects and funding levels are summarized in Table II by application areas.

TABLE II
RDT&E PROGRAM
(Dollars in Thousands)

Project	FY 1980 Actual	FY 1981 Estimate	FY 1982 Estimate
Aerospace Sys. Vulner. & Hardening (V&H)	8,623	8,700	10,400
Command, Control, and Communications (C^3)	5,178	4,700	2,900
Effects/Vulnerability Asses. & Data Eval.	9,984	13,071	12,878
High Alt. Phenomenology & Applications	5,136	6,500	10,500
Lab. Radiation Simulator Development	13,219	13,800	19,300
Biomedical Effects Research	11,648	12,600	16,000
Tactical Systems Vulner. & Hardening	20,295	24,000	23,900
Strategic Nuclear Implications & Asses.	3,948	4,000	5,400
Nuclear Effects on Electronics	13,022	12,300	14,500
Strategic Structures Vulner. & Hardening	10,252	10,000	21,800
Effects Simulation Using Radiation Simu.	16,289	27,600	46,900
Effects Simulation Using High Explosives	8,106	11,900	12,100
Effects Simulation Using Natural Disturb.	7,714	6,800	6,400
Underground Nuclear Tests	28,566	25,100	73,000
Theater Nuclear Forces Surviv. & Secur.	12,419	15,300	17,900
Physical Security	4,751	5,400	8,200
TOTAL DIRECT OBLIGATIONAL AUTHORITY (DNA)	179,150	201,771	302,078
TOTAL REIMBURSABLE OBLIGATIONAL AUTHORITY	1,221	6,100	3,900
TOTAL RDT&E (INCLUDING REIMBURSABLES)	180,371	207,871	305,978

I will first present the research we are pursuing in support of our strategic systems. Then I will review the programs to improve the survivability and endurance of communications, command, control, and intelligence (C^3I) systems. Next, I will discuss our evolving program supporting theater nuclear forces, followed by our physical security program and then I will outline our test programs for improving and validating the nuclear survivability of military systems. This latter summary will include both underground nuclear testing and the use of aboveground simulators. Finally, I will discuss our research in biomedical effects, including our Nuclear Test Personnel Review (NTPR) program for developing information on personnel exposure to ionizing radiation in past atmospheric nuclear tests.

Before starting on this agenda, however, I want to take special note of the fact that our FY 1982 budget submission, as amended, is designed to revitalize our efforts in basic nuclear weapons effects technology. Over the past several years, DNA has had to divert funding to address many system specific problems at the expense of the underground nuclear test program and the maintenance of the technology base program. It is most significant that this unfortunate trend now will be reversed.

Strategic Systems

Our RDT&E program in nuclear weapons effects addresses all elements of the strategic triad; ICBM's, aircraft, and the SLBM's. This program is closely coordinated with all Services and USDRE. We also support OSD (Policy), the Joint Strategic Target Planning Staff (JSTPS), and the intelligence community in the exploitation of weapons efforts for targeting. DNA is continuing to provide substantial support to the Air Force in development of the M-X weapon system. We have been a key player in the coordination of the different basing modes for the M-X system. Our M-X nuclear hardening and survivability program, managed in close coordination with the Air Force, contributes directly to the design and validation testing of the missile, protective shelter, and supporting C^3. We also support advanced research directly applicable to M-X site security. This past year, we were instrumental in identifying key nuclear survivability issues and in providing technical guidance which led to the Air Forces' decision on the spacing of the protective shelters. A DNA Task Force proposed the present electromagnetic pulse (EMP) protection scheme which permits close spacing of the shelters at substantial savings in cost and land requirements. Other review groups have been established under DNA auspices to ensure that all aspects of the M-X weapon system design meet nuclear survivability goals.

A major thrust of our M-X support in the coming year will be the development of source region EMP (SREMP) and blast simulators for validating the hardness of full-size protective shelters. The technical challenge lies both in the scale of the simulators (nothing comparable presently exists) and the complexity of the nuclear environments resulting from the many closely timed and regularly spaced bursts (i.e., multi-burst environment) presumed in the threat scenario. We also are developing test capabilities for combined in-flight loads on the missile. An underground nuclear test is planned for September 1982 to investigate the adequacy of the present design.

As you know, the Army's Low Altitude Defense (LoAD) anti-ballistic missile system is being considered as a defender of M-X in lieu of adding additional protective shelters in the event of a major growth in the perceived Soviet threat against M-X. Some of the technical uncertainties confronting the LoAD concept have to do with its performance in a multi-burst nuclear environment. To support this development, DNA recently has begun a joint nuclear hardness and survivability program with the Army similar to the one we have with the Air Force on M-X. This program will define nuclear environments, develop test techniques, and generate component hardness data for the LoAD interceptor, radar and data processor.

With regard to advanced strategic system technologies, we are participating actively in the Air Force's Strategic Missile Systems 2000 study, aimed at identifying future mission needs, system concepts, and associated technology requirements over the next several decades. Our work on secure basing and advanced reentry vehicle technologies will contribute directly to this important study.

In the area of strategic aircraft systems, we are assisting the Air Force in assessing the hardness of the B-52 and the air-launched cruise missile (ALCM). Our aircraft structural response program deals with thermal hardening schemes for aircraft and crew protection, blast damage avoidance, and damage tolerance criteria. We are making substantial progress in determining the vulnerability of aircraft to EMP. A joint EMP assessment program with the Navy will have immediate application to the Air Force Strategic Aircraft Protection Program to be initiated on the FB-111.

DNA is continuing its successful efforts with the Navy to improve the survivability of submarines to underwater nuclear explosions. We have developed new methods for predicting shock pressure loadings on submarine hulls, replacing mostly empirical procedures, and are now better able to protect critical internal equipments. The successful transfer of this technology to participating Navy laboratories and the incorporation of improved shock resistance techniques into Navy submarine design procedures are significant accomplishments. Other aspects of underwater explosion phenomenology on which we will be working relate to the generation of water waves, shock environments in shallow water, and cavitation loading effects on surface ships.

An area of renewed interest is the acoustic reverberations resulting from nuclear detonations in deep ocean basins (sometimes referred to as BLUEOUT).

In cooperation with the intelligence community, DNA is conducting several important programs on the physical and functional vulnerability of Soviet strategic targets.

In support of JSTPS, SAC and OSD, DNA is involved in research activities related to strategic nuclear weapon targeting methodology and employment as a basis for further development and implementation of national strategic targeting policy. We also actively support the recently established Joint Security Connectivity Staff in its efforts to analyze strategic connectivity under nuclear attack. To provide increased flexibility in nuclear weapon employment options, we are examining alternative uses of strategic nuclear forces against various aspects of the Soviet military force structure, political, governmental, and economic installations. Automated procedures are being developed for the JSTPS and the nuclear force commanders to implement these alternate targeting strategies. Our research is also placing substantial emphasis on the implication of protracted nuclear war in support of guidance contained in PD-59 Presidential policy directive and the Nuclear Weapon Employment Policy (NUWEP).

C^3I Systems

I will now discuss our program on survivability of communications, command, control and intelligence (C^3I) systems. For the most part, this activity directly supports our strategic activities; a lesser, but growing, effort relates to our theater nuclear force program which I shall cover subsequently.

There is widespread recognition of the need to enhance the survivability and reliability of C^3I systems to meet the needs of the National Command Authorities (NCA), as well as individual commanders, during all stages of nuclear conflict. DNA's program is intended to provide the technology and data base necessary for C^3I planners to meet these goals; that is, to ensure that systems (a) are designed to mitigate damage from nearby nuclear explosions, (b) are not subject to single-point vulnerabilities, and (c) are not degraded from the long-range effects of electromagnetic pulse (EMP) and propagation disturbances.

Satellites are among the most critical of our communication assets and of growing importance to the national defense. The detonation of weapons at altitudes above 100 kilometers poses a threat to both satellites as well as disrupting the radio frequency signals joining the satellites and ground stations and/or airborne platforms.

In the absence of atmospheric testing, we must rely on theoretical calculations supported by experimental simulations using the naturally or artifically disturbed ionosphere to gain a deeper understanding of radio frequency propagation disturbances. In our most recent and important such simulation conducted at Eglin AFB this past December, barium ionization clouds were released at an altitude of 180 kilometers and radio transmissions were made through the disturbed environment to test spread spectrum system concepts--such as those used in DSCS III and GPS--proposed to mitigate the disrupting effects. Preliminary data review indicates complete experimental success and the data are now being evaluated. Future experiments using high altitude barium releases and measurements in the naturally disturbed ionosphere are planned for the polar regions to further reduce propagation disturbance uncertainties.

Direct exposure of a satellite to nuclear radiation from a high altitude burst can create electrical currents in and on the satellite itself. A major portion of the DNA C^3I program is devoted to understanding these effects as well as providing facilities to demonstrate hardening techniques for our satellites. The cornerstone of our hardness verification capability for satellites will be the Satellite X-ray Test Facility (SXTF) now in development. The SXTF concept and capabilities have been described to you in previous years, and I will report upon its status in a few moments. Since the SXTF will not be on-line until 1984, we must rely on underground nuclear testing for hardness verification in the interim. Over the past several years, we have been conducting experiments on satellite components of increasing complexity. Last June, we exposed a full size satellite-like test article in the HURON KING underground test. The results showed that techniques used to protect military satellites from X-ray damage are generally effective. These tests are absolutely essential if we are to have confidence in nuclear survivability of our military systems.

Of comparable significance to satellite hardening is the susceptibility to electromagnetic pulse effects of ground portions of our national communications and power distribution systems. Many of the DoD's communication needs within the continental United States are supplied through leased commercial telephone service. The redundancy of facilities and interconnections in commercial land line systems is sufficiently great that, despite the lack of specific hardening measures, planners count on a degree of post-attack survivability for basic elements of the network.

Confidence in assured EMP protection for these commercial systems is a major limitation in survivability planning. DNA has been assisting DoD planners in developing technology, program plans, and cost estimates for providing EMP protection to a small portion of these systems to support time-urgent, critical DoD strategic command and control requirements. We are also evaluating alternative systems that may satisfy these requirements in a more cost-effective and maintainable manner. I must stress, however, that these activities deal with only a small portion of the government's total communication needs in the trans- and immediate post-attack period. This is an area, I believe, in which DNA is being particularly responsive to national needs. DNA is investigating the feasibility of developing low cost EMP protection concepts that can be applied to all elements of the national telecommunications systems, and will develop engineering maintenance practices necessary to implement and maintain this protection.

DNA recently has established a new technology data base program on nuclear effects on electronics, combining existing research efforts on transient radiation effects on electronics (TREE) with related EMP and SGEMP activities. The dramatic advances in microelectronics--improvements in signal processing capability, weight and volume reduction, and decreased power consumption--are making military applications increasingly dependent upon this technology. Unfortunately, this trend in microminiaturization also has increased component sensitivity to both natural and nuclear radiation. DNA has demonstrated that a single high-energy neutron, proton, or other cosmic ray can alter electronic memories. We currently are investigating the extent of this problem in a joint program with DARPA. In addition, we are emphasizing the development of hardening technology at the major semiconductor manufacturers to facilitate the availability of hardened parts for military systems designers. An important aspect of this is our support to the new DoD Very High-Speed Integrated Circuits (VHSIC) program in the development of hardening procedures within the VHSIC contractor community.

Theater Nuclear Warfare

It was reported to the Committee last year that theater operational commanders enthusiastically received our program in theater nuclear warfare. This program initially focused on NATO Central Europe in the attempt to improve the U.S./NATO theater nuclear warfare posture. I am pleased to report now that we have expanded our efforts during the past year to other theaters where the spectre of nuclear warfare unfortunately has been reinforced by Soviet and surrogate belligerence. Principal among these are the Western Pacific, Southwest Asia, and the worldwide maritime theater. With respect to European theater nuclear forces, our comprehensive assessments of the nuclear balance continue to provide valuable inputs to the defense force posture planning community. Studies of Soviet and Warsaw Pact strategy, doctrine and force structure have identified vulnerabilities that can be exploited by our theater nuclear forces.

In continuing our support to U.S. and NATO theater nuclear warfare planners, we have recognized the need to develop automated nuclear weapon planning techniques. A significant portion of our research supports the ability to employ nuclear weapons against movable targets. The problems inherent in timely and accurate weapon delivery against such targets demand a near-real time targeting capability. These targeting tools must be able to deal with a range of battlefield situations--from enemy units in contact with friendly forces, to enemy units in the second echelon moving forward from rear assembly areas. The application of the emerging microcomputer technology is providing a new capability to meet this demand. In addition, improved applications of theater nuclear weapons have been identified for a variety of fixed targets, the destruction of which will further degrade, delay, or disrupt the Warsaw Pact forces.

A key issue before the nation and the Congress is modernization of our theater nuclear forces. DNA's force development activities link closely to complementary activities among the Services to ensure that doctrine, tactics, and weapons are optimally designed and deployed to meet the threat, and strike the best compromise for safety, security, and survivability. In so doing, we assure a balanced approach to force modernization efforts by the Services. For example, we are extending our evaluation of the optimum utility of GLCM and manned aircraft for nuclear interdiction of first and second echelon enemy ground forces, and continuing our support for a CNO-sponsored effort to improve Navy posture for maritime theater nuclear warfare.

This year marks another major expansion in DNA's theater nuclear programs. While we continue our European programs as I have described, we are also embarking on a major net assessment of the Pacific Command's theater nuclear balance at the request of the theater Commander through the Joint Chiefs of Staff. PACOM includes a vast area, encompassing over one-half of the earth's surface and 70 percent of its ocean waters. Over the next few years, we will be supporting programs to address nuclear force posture options, improved nuclear weapon planning capabilities, and alternate nuclear doctrine. We anticipate this initial effort in support of the Pacific Command to develop and contribute significantly to our theater nuclear deterrence posture and world stability.

Let me turn now to our Theater Nuclear Force Survivability, Security and Safety (TNFS^3) Program, an activity closely aligned with our theater improvement efforts. The TNFS^3 Program was initiated in 1978 and expanded last year to encompass the broadest possible spectrum of survivability and security issues affecting our theater nuclear forces--survivability from all enemy attack options; security from unauthorized seizures. The TNFS^3 security initiatives impact the US nuclear weapon program worldwide and therefore interact closely with our physical security program. I will address these common initiatives further when I review the physical security program.

TNFS^3 examines every facet of the force-delivery systems, logistics, storage sites, communications, and the nuclear weapons themselves--in order to reduce the vulnerabilities of our theater nuclear forces. Major efforts are underway to improve the survivability of air-delivered nuclear weapons. Testing has begun on a totally new concept for storing weapons in secure vaults inside aircraft shelters. A prototype vault will also be further tested in conjunction with a full-scale explosive test of third-generation hardened aircraft shelters. These two projects have the potential for enormously improving not only survivability but also the security and safety of Air Force theater weapons. Other recent accomplishments include assessing the pre-launch survivability of the ground launched cruise missile, developing improved camouflage concepts for fixed theater storage sites, testing of armored blankets for protecting nuclear weapons against small arms fire, and investigating signature reduction concepts for deployed missile systems.

It is very important to note that all the TNFS^3 projects have been planned and developed in cooperation with the Services and the theater commands. This close-working relationship has been a key factor in the success of the TNFS^3 Program to date.

Physical Security (and Security Portion of TNFS^3): Our physical security research program is closely coordinated with TNFS^3. At the request of the Under Secretary of Defense Research and Engineering (USDRE), DNA manages exploratory development of physical security systems for the DoD. DNA emphasizes the system aspect of security and attempts to provide Services with resources for enhancing the performance of their security forces as well as hardware, facilities, and doctrine. We are an advocate of sound systems integration. We are therefore placing the development of a computerized security system assessment methodology and a nuclear security operational test site at the highest priority.

An excellent example of physical security hardware development (in coordination with TNFS^3) is the igloo deterrent-delay program. In 1974, under physical security exploratory development, DNA and Sandia National Laboratories (SNL) began exploration of concepts to place automated devices inside storage structures to deter and delay forced entry.

At the special request of theater components, DNA, under its TNFS^3 program, is assisting the Army in packaging these deterrent-delay prototype modules for overseas demonstration and testing by NATO.

In the personnel development area, DNA has recently completed a comprehensive human factors review of Army military police performance in nuclear security. We are currently assisting the Air Force Security Police in a parallel effort.

Testing of Air Force doctrinal concepts for the security of field-deployed GLCM is another example of close physical security-TNFS^3 interaction.

Other significant security programs include providing technical assistance to the Corps of Engineers in the installation of sensor systems developing an electronic sensor countermeasure with the State Department, exploring improved design and materials for high security facilities, and developing improved shipboard security hardware. Finally, as stated in the introduction, the DNA physical security program provides support to counterterrorism programs having roles in counter nuclear terrorism and nuclear weapon recovery.

Test Programs

I turn now to DNA's testing activities. Many of our research programs involve experimentation arising from the need to simulate the radiation and blast effects produced by nuclear explosions and to determine the influence of these effects on the performance of military systems. The most significant and still indispensable aspect of our test capability is the underground testing program conducted at the Nevada Test Site (NTS). I am extremely pleased to report that our FY 1982 budget submission for underground testing, as amended, provides for doubling the rate of testing to one test a year, and will permit us to carry out a needed facilities upgrade program at NTS. As part of the DoD Augmented Test Program and our continuing review of underground test requirements, we are proposing to conduct a number of critically important experiments over the next several years. These include system generated EMP phenomenology tests in support of M-X; and, with Air Force concurrence, a major test of the M-X missile; physics experiments to enhance the development of high level X-ray simulators; cratering physics tests; and the development of improved techniques for testing the X-ray response of military systems.

On this high note, I am also pleased to report that two very successful underground tests were conducted within the last year--HURON KING in June, and MINERS IRON at the end of October.

HURON KING, a vertical line-of-sight test, was part of an ongoing DNA program to provide data on the adequacy of theoretical analyses and aboveground test techniques for estimating the hardness of satellites exposed to nuclear radiation. The test was coordinated with the Air Force. This very successful test has improved significantly our data base on nuclear hardening of satellites.

MINERS IRON was a horizontal line-of-sight test. Approximately 2,000 channels of data were obtained in this test. As noted earlier, a final test of the M-X missile structure is planned for September 1982.

It should be noted that the rate of DoD underground nuclear testing has significantly declined in the past few years as a result of budget limitations, the high inflation rate of test site labor and the broad scope of tasking given to DNA. This decrease has also been experienced by the Department of Energy. An Augmented Nuclear Test Program (ATP) provides for an increased rate of testing.

The next major event in our high-explosive testing program will take place next September at White Sands Missile Range. Identified as MILL RACE, this test will simulate the airblast effects from a one-kiloton nuclear surface burst.

Recent advances in large-area thermal radiation simulation will be utilized to test for combined airblast and thermal effects on selected experiments. All three Services, as well as the Federal Emergency Management Agency (FEMA) and several foreign countries will field experiments on the MILL RACE test. These include model structures of LoAD radar and interceptor cannister to determine airblast loads, new Army designs for hardened tactical and mobile electronic shelters, a Navy program for new ship superstructure construction, and industrial hardening techniques developed by FEMA. The Strategic Air Command will fly several B-52s as part of their damage assessment strike analysis program. AF-86 drone also will be in flight to measure low-level airblast loads. DNA's next large-scale high-explosive test, DIRECT COURSE, is scheduled for September 1983.

An equally important part of our test program is the development of advanced laboratory radiation simulators. These simulators are necessary to increase our overall nuclear weapons effects testing capability and to lessen our dependence on underground nuclear testing.

My predecessor has reported to you previously on our plans for a Satellite X-Ray Test Facility (SXTF). We have made substantial progress on design of the SXTF this past year, and the facility should be operational in 1984. Development of the X-ray sources was successfully completed in 1980, as was a survey of potential facility sites. We expect to make final site selection early this year.

X-ray sources developed for SXTF presently are being used to test the M-X reentry vehicle, missile piece parts, and small subsystems. We expect that a next-generation, very high power source will be operational in early 1985 which will provide the capability to test larger reentry vehicle and missile components. To attain the high X-ray output eventually required for full-system reentry vehicle testing, we have been exploring the potential of radiation amplification using the inertial confinement fusion concept. We have a formal agreement with the DoE under which DNA provides the pulsed power generator and primary radiation sources, and DoE provides the technology to amplify the radiation output.

As already mentioned, DNA is assisting the Air Force in the development of a testing plan to validate the hardness of the M-X shelter to the effects of source region electromagnetic pulse (SREMP). A late-time SREMP simulator capable of delivering of electrical energy into the major shelter penetrations (power lines and medium frequency antenna) will be procured in FY 1981-82 and readied for field testing in FY 1983.

Our Advanced Research Electromagnetic Simulator (ARES) is capable of high-altitude electromagnetic pulse tests of missiles, small-to-medium size aircraft, and cruise missiles. Tests of nearly all major missile systems such as SPRINT, SPARTAN, MINUTEMAN, POLARIS, and TRIDENT have been carried out in the ARES facility since 1971. Last year, full system tests of the United Kingdom A3TK POLARIS and TRIDENT C-4 missiles were completed. The ARES instrumentation system currently is being upgraded to support M-X missile testing beginning in January 1983.

We are developing a simulator to test satellite system response to communications link disturbances caused by high altitude nuclear weapons bursts. A limited capability simulator will be used to test selected Defense Satellite Communications System components this year, and the full capability simulator will be used on the Integrated Operational Nuclear Detection System (IONDS) in early 1982. These simulators, which are small devices of two to three 19 inch cabinets, will be placed in the radio signal link between the antenna and the receiver.

Biomedical Effects

To this point, I have been describing DNA activities related to military hardware and systems. Our mission also includes the effects of nuclear weapons upon humans. Most of our research on biological effects is done at the Armed Forces Radiobiology Research Institute (AFRRI) in Bethesda, Maryland, which DNA administers. Scientists at AFRRI utilize a variety of approaches to determine the response of cells, tissues, organs, and intact laboratory animals to various levels of ionizing radiation so that the response of man may be estimated.

Past research has focused mainly on early incapacitation of personnel at fairly high doses of ionizing radiation. Recently, we established that the level of radiation affecting performance decreases as the complexity of the task requirements--both mentally and physically--increases. Thus, the military significance of lower levels of exposure is gaining importance, and we will be investigating this area more fully. The AFRRI Board of Governors, which includes the Surgeons General of the Military Departments, recently agreed to assist DNA in updating the medical and operational research requirements for the Institute.

DNA, as the designated Executive Agent for DoD, is continuing Nuclear Test Personnel Review (NTPR). This program, begun in 1978, is to identify all DoD-affiliated participants in the 1945-62 atmospheric nuclear tests, document their involvement, and establish their probable radiation exposures. With the support of the National Academy of Sciences, we are also conducting a survey of the health experience of a large sample--about 40,000--of the estimated 220,000 test participants. The bulk of the dose reconstructions have been completed. About three more years will be required for the health survey and publication of final radiation-health data correlations.

Operation and Maintenance

DNA's O&M funding requirements by program category are furnished in Table III below.

TABLE III
O&M Program
(Dollars in Thousands)

Program Category	FY 1980	FY 1981	FY 1982
Headquarters/Field Command Operations	12,919	12,926	14,663
Nuclear Stockpile Management	3,129	3,514	3,831
Johnston Atoll Operations	9,159	10,937	13,885
Enewetak Base Camp Support	3,109	--	--
Nuc. Wpns Accident Training Exer.	396	2,250	565
Overseas Nuclear Emerg. Search Team	223	581	626
Total O&M	28,935	30,208	33,570

Headquarters/Field Command Operations

This program category provides funds for daily operating expenses at Headquarters DNA in Washington, D.C. and at Field Command in Albuquerque, NM to support the following missions:

-- Management of DoD research programs involving nuclear weapons effects research and testing, and survivability and security of theater nuclear weapons and forces.

-- Provisions of quantitative assessments to the Secretary of Defense, the JCS, the Services, the CINCs, and subordinate commanders concerning the relationship of nuclear weapons effects to nuclear weapons development and to strategic and theater nuclear weapons employment policies.

-- Accomplishment of annual Defense Nuclear Surety Inspections on 20-25% of all Service nuclear-capable units.

-- Provision of management assistance to SecDef, the JCS, and the Services on nuclear weapons security, nuclear weapons safety, establishment of requirements for nuclear weapons.

-- Support to the JCS and OSD on all aspects of the impact of a possible Comprehensive Test Ban Treaty on national security.

-- Development, coordination, and execution of nuclear weapons accident exercises and operations.

-- Coordination of DoD action on all aspects of the health effects of low-level ionizing radiation, including development of a uniform U.S. Government approach to the problems associated with exposures from all sources.

The increase in this program category results from: (1) an increase for the Nuclear Weapons Site Characterizations Program; and (2) other miscellaneous program changes.

Nuclear Stockpile Management

Resources included in this category support DNA's mission to provide consolidated management of all nuclear weapons in DoD's stockpile. This mission, worldwide in scope, requires DNA to maintain overall surveillance--and provide guidance, coordination, and assistance, as appropriate for all nuclear weapons in DoD custody, from completion of production by DOE through retirement. DNA, as the exclusive source of data for the complete stockpile, performs this function by maintaining and operating the national nuclear weapons accounting and reporting system. This system enables DNA to provide timely, accurate, and complete data on each weapon in the stockpile--including serial number, location, application, configuration, and condition--to assure that the status of all DoD nuclear weapons is known at all times.

Johnston Atoll Operations

DNA is charged, in conjuction with DoE, with maintaining an overseas atmospheric nuclear test capability--to include the operation and maintenance of Johnston Atoll--in accordance with the revised Presidential guidelines for Safeguard C of the Limited Test Ban Treaty. Actual operations and maintenance at Johnston Atoll are performed for DNA by a civilian contractor. Operations financed include normal base support functions, in addition to marine operations and other unique island requirements essential for life support at this remote facility in the Pacific. The increase requested in Fiscal Year 1982 is primarily for a project to repair the runway on Johnston Atoll which is essential for normal day to day operations of the Atoll.

Nuclear Weapons Accident Training Exercise (NUWAX)

Back in April 1979, the first DoD/DoE Nuclear Weapons Accident Exercise (NUWAX-79) was conducted at the DoE Nevada Test Site north of Las Vegas, NV. As a result of NUWAX-79's success and the lessons learned, the ATSD(AE) directed DNA to develop an expanded scope, follow-on exercise (NUWAX-81). NUWAX-81 will include significant involvement with national, state and local emergency response agencies, with emphasis on expanded participation at the Washington level. The scenario simulates a peacetime nuclear weapons accident which poses a radiological threat to life and property. Approximately 560 player/participants and controller/umpire personnel are expected to be involved. A total of $2.3 million was budgeted for all aspects of this important event. Participating agencies include DoE, FEMA, EPA, FAA, the National Laboratories, Military Services, and the California State Office of Emergency Services. The funding decrease in FY 82 represents the difference between an exercise year (FY 81) and a planning year (FY 82).

Overseas Nuclear Emergency Search Team (ONEST)

Last year I discussed the Overseas Nuclear Emergency Search Team. This program has developed smoothly. Today there are 32 neutron and 12 gamma handheld "briefcase" nuclear detectors. During this fiscal year, larger equipment will be produced and deployed. These include a mobile truck mounted detector, ten dual road block monitors and two airborne detector pods capable of being mounted on the US military helicopters. In addition, a five man team of civilian scientist/technicians will provide a permanent incountry training, maintenance and calibration capability. A two man military liaison element (one LTC and one E-7) will also be stationed to assist in managing the project.

Procurement

The procurement funding requirements by program category are furnished in Table IV.

TABLE IV
Procurement Program
(Dollars in Thousands)

	FY 1980	FY 1981	FY 1982
Vehicles	82	194	228
Other Capital Equipment	750	1411	1702
TOTAL PROCUREMENT	832	1605	1930

The DNA Procurement request provides for the replacement of general and special purpose vehicles, material handling equipment and utility mobile equipment used at HQS DNA and DNA installations. Also included are funds to support the procurement of other capital equipment essential to the performance of agency missions.

The fiscal year 1982 budget provides for acquisitions of 31 cargo-carrying and special purpose vehicles and reflects an increase of $34,000 due to a change in quantity and type of vehicles to be purchased.

A major portion of our FY 1982 procurement request is shown under other capital equipment and relates to the planned purchase of a replacement computer at HQS DNA. We have budgeted $1,500,000 to acquire the computer to replace an obsolete piece of equipment and to support the increasing demands for ADP services.

U.S. NUCLEAR WEAPON EFFECTIVENESS

General GRIFFITH. It is a distinct honor for me to be able to appear before you this morning to talk about our fiscal year 1982 budget. I have with me my Deputy Director for Science and Technology, Dr. Ed Conrad, and my comptroller, Mr. Paul Carew.

As you probably know, sir, the Defense Nuclear Agency (DNA) is responsible within the Department of Defense for a wide range of functions that relate to nuclear weapons. In particular DNA is the principal agency within the DOD for doing exhaustive research on all of those things that relate to the effectiveness and the survivability of our nuclear systems the survivability of our own systems against possible attack and the effectiveness of our own systems in the event that they should be needed.

Our R.D.T. & E. programs provide data on the effectiveness of our nuclear weapons and those of potential enemies. We look at improvements in survivability of our theater nuclear forces as well as our own strategic forces. We get heavily involved in the physical security of nuclear weapons, biomedical data on nuclear weapons effects and C. 3 I.

We also have a fairly substantial O. & M. program. DNA performs numerous functions related to nuclear weapons in this capacity. We inspect nuclear-capable units of all of the services and we formulate nuclear weapons accident procedures and training guides. Along this line we recently finished a major nuclear weapons accident exercise, NUWAX-81.

We also provide support to comprehensive test ban negotiations when these are underway. We have taken the lead in developing DOD overseas nuclear emergency search teams. This is the ONEST program. We also work with the national atmospheric nuclear test readiness program under Safeguard C to the limited test ban treaty. This of course is carried out on Johnston Atoll. We also coordinate with the military departments in establishing nuclear weapons safety rules and carry out numerous other activities related to this.

Finally, we become involved in nuclear weapon security and counternuclear terrorism both overseas and here within the States. We have a substantial program in the physical security of nuclear weapons and we make certain that this is integrated as far as looking at the threat is concerned. We also work closely with our own special forces teams, to make sure we do all we can in this particular area.

As far as the general mission areas are concerned this summarizes all I would say at this point, except, to add that we are requesting $338.1 million in fiscal year 1982. About 89 percent of this is devoted to R. & D. About 10 percent is for O. & M. and 1 percent is for procurement and military construction.

We furnished a detailed statement for the record, sir, and at this point I would suggest we answer your questions.

Senator **Rudman**. We obviously cannot get into your R. & D. budget this morning without going into closed session. If we have any questions we will ask you to supply those for the record.

JOHNSTON ATOLL RUNWAY

There are a couple of minor points. For Johnston Atoll you have a $4 million request to repair the runway there. Is that jointly operated between your agency and DOE?

General **Griffith**. Yes, sir. That is the center for Safeguard C program. DOE does have a heavy hand in the operation of Johnston Atoll. They make certain that the JTF–8 facilities are kept operational, that the territory is secure in the Hawaiian Islands, and that the weapon center areas are kept operational. DNA maintains the life support systems.

Senator **Rudman**. So those are administrative functions and all would be found in your budget.

General **Griffith**. Some of them would be.

Senator **Rudman**. Could you tell us what type of services are performed by contractors that you contract with at Johnston Atoll?

General **Griffith**. As far as DNA is concerned, we are the manager of the island. The Air Force actually owns it. It is in caretaker status. We assure the availability of it until we are relieved. Of course there are other purposes that Johnston may be used for besides the nuclear weapons testing.

On the management of the atoll, DNA field command at Albuquerque has the day-to-day interface with the contractor. They budget for the operation of the runway, the life support systems out there to keep the power going, to keep the utilities going, to keep the barracks and whatever would be necessary in the event we would have to resume testing.

Senator **Rudman**. How many people do you have located out there?

General **Griffith**. We have about 350 people.

Senator RUDMAN. That is a constant force.

General GRIFFITH. Those are not DNA people. Those are contracted.

Senator RUDMAN. I understand. How many of your own people are there?

General GRIFFITH. We have six.

NUCLEAR WEAPONS SITE CHARACTERIZATION PROGRAM

Senator RUDMAN. You have a nuclear weapons site characterization program initiatated in 1981. I assume a great deal of that is classified information. what can you tell us about it that is not classified that you can discuss in open hearing? Or is there really nothing you can say?

General GRIFFITH. I would rather stay away from that.

Senator RUDMAN. Fine.

General GRIFFITH. I think there is something else I should say about Johnston Atoll, but I do not want to speak for the Army. There is a substantial chemical program out there. Facilities for the storage of chemicals are going to be added so there are some negotiations going on and careful planning is being done to insure that these two programs are not on a collision course.

Senator RUDMAN. General, thank you very much.

General GRIFFITH. Yes, sir.

DEFENSE INVESTIGATIVE SERVICE

STATEMENT OF JOHN L. SPROUL, ACTING DIRECTOR, DEFENSE INVESTIGATIVE SERVICE

ACCOMPANIED BY:

FREDERICK E. TAYLOR, DIRECTOR FOR MANAGEMENT AND RESOURCES, DEFENSE INVESTIGATIVE SERVICE

FRANK LARSEN, ACTING DIRECTOR FOR INDUSTRIAL SECURITY, DEFENSE INVESTIGATIVE SERVICE

CHARLES E. FORSYTHE, BUDGET OFFICER, DEFENSE INVESTIGATIVE SERVICE

PREPARED STATEMENT

Senator RUDMAN. The final witness before the subcommittee this morning is Mr. John L. Sproul, Acting Director, Defense Investigative Service.

Mr. Sproul, good morning. If you would like to proceed with your summary, your entire statement will be incorporated into the record.

Mr. SPROUL. Thank you, sir.

[The statement follows:]

PREPARED STATEMENT OF JOHN L. SPROUL

ACTING DIRECTOR

DEFENSE INVESTIGATIVE SERVICE

Mr. Chairman and members of the committee, I am John L. Sproul, Acting Director of the Defense Investigative Service (DIS). It is a pleasure for me to appear before you to discuss our budget request for fiscal year 1982. Before getting into the specifics of that request I would like to inform you of an important addition to our mission.

Defense Industrial Security Program

Effective 1 October 1980, the Defense Industrial Security Program (DISP) was transferred to DIS from the Defense Logistics Agency. This is a sizeable addition to our mission since it represents 25 percent of the resources in our budget request. The primary objective of the transfer was to improve the administration of the program by increasing the quality and effectiveness of industrial security inspections and surveys. Thus far in fiscal year 1981 we have effected an orderly transition and are conducting quality efforts. We are however, experiencing an unacceptable increase in the backlog of slipped inspections. It is estimated that in fiscal year 1982 slips will decrease to an acceptable level and continued emphasis will be placed on quality and increased effectiveness.

Operation and Maintenance Budget Request

The $68.3 million budgeted in the fiscal year 1981 column of our Operation and Maintenance request is $25.4 million greater than the $42.9 million appropriated to DIS. The increase includes 1) $4.3 million for the civilian pay raise supplemental 2) $17.8 million for the DISP transfer, and 3) $3.4 million for 313 additional spaces (225 for personnel security investigations and 88 for industrial security inspections). Funds for the additional spaces were transferred from other Department of Defense (DoD) programs. The urgent need for these spaces is based upon a tremendous increase in our workload which will be addressed below.

The fiscal year 1982 Operation and Maintenance budget request of $76.2 million is $7.9 million greater than the $68.3 million budgeted for fiscal year 1981. This increase includes 1) $1.2 million for built-in items (such as inflation, annualization of the FY 1981 civilian pay raise and the Federal Employees Compensation Fund), 2) $6.4 million for annualization of the costs of the spaces added in fiscal year 1981 and 3) $.3 million for the civilianization of 65 military spaces in fiscal year 1982.

Personnel Security Investigations Workload

Under the DoD Personnel Security Program, an individual must be investigated and a security clearance awarded before he or she can perform work in a secure environment. The Defense Investigative Service (DIS) performs the investigative phase of the DoD Personnel Security Program. The adjudicative phase is conducted by the requesters of investigations. The Defense Industrial Security Office (DISCO) requests and adjudicates investigations on DoD contractor employees. DISCO is a functional element of the DISP which was transferred to DIS on 1 October 1980. The longer a personnel security investigation takes, the greater the loss in productivity of the individual being investigated. Ultimately such delays cost the government money. In the industrial environment, for example, the importance of time starts before an actual bid on a contract is ever made. Persons bidding on a project or program must be cleared before they can have access to the classified information pertinent to the project or program on which they are bidding. Once a contract is awarded, the work force must be cleared before the work can be started and turnover in the work force requires the clearance of replacement personnel. The same applies, to a lesser degree, to civilian employees of the government and military personnel. The important point to keep in mind is that the longer it takes to complete investigations, the more time is lost on important work and the more the ultimate cost to the government. Case completion times in excess of 65 days are considered unacceptable.

Average case completion times in our budget request were estimated to increase from 93 days in fiscal year 1980 to 135 days in fiscal year 1981 and to decrease slightly to 124 days in fiscal year 1982. The request for fiscal year 1981 was based upon a fiscal year 1980 backlog of 64,600 cases and an estimated 176,600 requests for new investigations. The request for fiscal year 1982 was based upon a fiscal year 1981 backlog of 68,500 cases and an estimated 171,600 requests for new investigations.

Since our budget request was submitted the situation has worsened. Even assuming our total budget request is granted for fiscal year 1981, we now estimate 178,500 cases will be opened, 88,000 cases will be backlogged at the end of the year and the average case completion time will increase to 148 days.

This May, the major requestors through the Office of the Secretary of Defense notified DIS to expect 226,000 requests for investigations in FY 1982. It would represent a 32 percent increase over the 171,600 investigative openings in this budget. These additional openings would cause the end of the year pending to increase to 124,000 cases vice 43,700 in the budget. The average case completion time would be 162 days, or nearly 100 days more than considered acceptable.

This is by far the largest workload in the history of DIS. The increase began during the fourth quarter of FY 1979. The average completion time for the fourth quarter of FY 1979 was 76 days with a pending backlog of about 34,000 cases. By the second quarter of FY 1981, the time was 142 days with a pending backlog of about 80,000 cases.

Industrial Security Workload

Our industrial security workload estimates have also changed since the budget was submitted. It is now estimated that slippage in scheduled industrial security inspection surveys will be 2,900 at the end of FY 1981. This increase in slippages over the estimated 1,000 in the President's Budget is due to efforts to improve the quality of inspections and the personnel turmoil related to the functional transfers. The improvement in the quality of the inspections effort was one of the major objectives of the functional transfer. Industrial security end strengths reflected in the FY 1982 President's Budget, to include the full year's impact of the 88 civilian spaces, should result in a continuation of an improved quality effort with 500 slipped inspections carried over to FY 1983. The improved quality effort in conducting inspections and surveys and greater assistance provided contractors in implementing industrial security programs should help alleviate our concern that the number of unsatisfactory and deficient conditions existing in industry have been increasing over the last few years.

Law Enforcement Mission

Although the budget request does not include any increase for our law enforcement mission, I would like to digress for a moment to inform you of recent accomplishments and the impending transfer of the mission to the Defense Audit Service (DAS).

As you recall DIS is assigned criminal investigative responsibility for the Defense Agencies and the Office of the Secretary of Defense. We currently have 191 criminal investigations pending, which includes 168 fraud cases and 11 fraud prevention surveys. Forty-eight investigations are before a grand jury and an additional 14 are under prosecutive consideration by United States Attorneys. In addition to the above effort, DIS also operates the DoD Hotline, which has resulted in a significant number of investigations.

A substantial number of fraud investigations conducted by DIS has utilized the team approach. This concept developed jointly with the Defense Logistics Agency and the Defense Contract Audit Agency has been used successfully in more than 45 recent investigations, which involved multi-million dollar contracts in most cases. A recent example of the successful application of the team concept was a two and a half year investigation of a defense contractor involved in substantial cost mischarging. A fine of $706 thousand was levied against the company and fines of $20 thousand each and six months suspended sentences against two senior vice presidents for their role in the mischarging.

On April 20, 1981 we were informed that the DIS law enforcement mission will be transferred to the Defense Audit Service which will report to a new Assistant to the Secretary of Defense (Review and Oversight). This new official will serve as the principal staff advisor to the Secretary of Defense for matters related to the combatting of fraud, waste and abuse in DoD programs and operations.

Seventy military billets were converted to civilian positions during fiscal year 1981 and 65 additional military billets are scheduled for conversion to civilian in fiscal year 1982. From fiscal year 1976 through fiscal year 1979, we civilianized all but 200 of our original 1,750 military billets. This civilianization program was accomplished at the direction of Congress. During the course of that conversion program, we studied the effectiveness of our civilian work force in order to determine whether further civilianization was in the best interest of the service. We have concluded that, in accord with the intent of Congress, all military billets in DIS should be converted to civilian positions. Accordingly, in addition to the civilianization provided for in this budget, the 80 military billets remaining in DIS in fiscal year 1982 are scheduled to be converted to civilian positions during fiscal year 1983. These 80 military billets include 15 authorizations transferred to DIS in October 1980 with the transfer of the Defense Industrial Security Program from the Defense Logistics Agency. By the end of fiscal year 1983, this agency will have been completely civilianized.

Procurement Budget Request

The fiscal year 1982 procurement request is for $1.747 million. It includes $1.592 million for 261 motor vehicles, including 254 compact and sub-compact sedans, 5 half-ton pick-up trucks and 2 vans. The pick-up trucks and vans will be used for courier service and logistic support at the regional field offices and the Personnel Investigations Center (PIC). One hundred and twenty-one of the 261 vehicles requested will be used to replace a portion of our present inventory of vehicles meeting the DoD replacement criteria for age and mileage. One hundred and forty sedans will be used to provide vehicles for the 150 new agents required to meet an increasing workload and minimize case completion times. In most locations economics and efficiency require DIS agents to use motor vehicles to conduct investigative leads. Without an increase in vehicles to transport the new agents, the workload and our completion time goals could not be achieved.

In the category of "other capital equipment," $155 thousand is requested to procure an emergency generator and 32 Data Encription Devices and Microfiche File Unit. The emergency generator will be used to replace an old generator located at the PIC which has broken down repeatedly and its repair has been found to be not economically feasible. The Data Encription Devices will be used to prevent inadvertent disclosure of Defense Central Index of Investigations (DCII) data, or deliberate subversion of the system by unauthorized personnel after duty hours. These disclosures would be detrimental to the interests of the individual whose data are disclosed and would cause unnecessary operational difficulties for DIS as well as other DoD components using the DCII. Sensitivity of the DCII data base requires measures to protect it because its contents are subject to the provisions of the Privacy Act of 1974.

Before closing let me emphasize the importance of the funds requested for annualization of the additional spaces authorized in FY 1981. Since current case backlog and average case completion time estimates are even higher than those in the budget, this request is the bare minimum required. We need to remember that the less time it takes to complete an investigation, the less time is lost on important work and this all results in less cost to the American taxpayer.

PERSONNEL SECURITY PROGRAM

Mr. SPROUL. In addition to the prepared statement we would like to briefly review a critical area this morning, principally in the personnel security program. In our budget submission for fiscal year 1982 we ask for $76.4 million and spaces of 2,722. Of that total number approximately 73 percent or 1,997 spaces are devoted to the personnel security program. That is the portion that we would like to review with you very briefly.

Senator RUDMAN. Fine.

Mr. SPROUL. The assumption in the budget was based on receiving 171,600 requests for investigations. That would find us with an average case completion time of approximately 124 days, and at the end of the year we would have approximately 43,700 cases pending. I think it is important to comment at this time that the average case completion time of 124 days is almost double our long-range goal of 65 days.

Just recently the Office of the Secretary of Defense went to the three services, the DOD agencies, and asked them for their estimates of investigative requests for fiscal year 1982. Based on their figures we now estimate our case openings to be 226,000 or an increase of 37 percent over what we budgeted for. If this were so, we would find out average completion time going up to 162 days, and at the end of that year we would have a backlog of more than 124,000 cases. Of course this is unacceptable and a very critical situation.

Now when those numbers were provided as a result of a number of policy initiatives by the Deputy Secretary of Defense, those figures have now been revised and we expect case openings in 1982 to be approximately 201,000. This is still 17 percent more than we budgeted for. It would find our average completion time to be approximately 147 days, and we would end up the year with better than 89,000 pending cases.

AVERAGE COMPLETION TIME

Senator RUDMAN. Would you define average completion time? Is that from the time that you get the request until the time that it is completed?

Mr. SPROUL. That is true, all of the cases for the entire year, sir. The day we receive the request the clock starts. The day it is closed is the last day.

Sir, the Deputy Secretary of Defense outlined his concern in this program in a letter of June 16 to six congressional committees. If I may I would quote one sentence from his letter: "The resultant impact upon DOD operation readiness mission accomplishment is simply not acceptable."

The cost and delays in industry alone is several times greater than it would take to get our program well. One of our major requestors last May sent a letter to the Deputy Secretary of Defense. If I may I would quote three sentences from his letter that summarize it very well:

> A predicted sharp escalation in case completion time which will cause further delays in granting clearances must be reviewed with alarm. The impact on mission accomplishment of OSC, JCS, and the defense agencies as well as on operational

readiness of our field forces is obvious. The cost of having thousands of personnel in Government service and industry underutilized or virtually idle is staggering.

In addition to the Secretary's expression of concern, and actions taken, he has also requested the three services to provide temporary assistance wherever they can. He is also considering a significant augmentation in fiscal year 1982 and outyears.

In the meantime DIS has taken action. We have on loan from the Office of Personnel Management 28 investigators. They will be with us for the balance of this fiscal year. Just recently the Air Force Office of Special investigations made available 30 investigators for 90 days. They were sent to our more critical areas in California. We have also directed 8 hours of overtime per week for each one of our investigators, again to assist in reducing our backlog.

INVESTIGATORS ONBOARD

Senator RUDMAN. How many investigators do you have now of your own?

Mr. SPROUL. We have approximately 1,000 DIS investigators, sir.

Regardless of our efforts and regardless of the efforts of the Secretary of Defense, we are unable to provide a timely product to our requestors. There is no question that the actions we are taking day to day will help, but they will not correct the situation. I think what I am trying to summarize here is that the more time we take to complete an investigation, the greater loss this individual is to industry and the services.

Even if the budget that we have submitted now is approved based on this increase, we would find our average case completion time to be approximately 147 days. This is 82 days longer than I indicated earlier, our long-range goal of 65 days. Last week our completion time was a high of 162 days.

COMPLETION TIMES

Senator RUDMAN. What is the lowest average completion time in the last 3 years?

Mr. SPROUL. In 1978 it was about 70 days, sir.

Senator RUDMAN. What was your staffing level at that time?

Dr. TAYLOR. It was 1,790.

Senator RUDMAN. I am talking about the number of investigators, and that is opposed to how many now?

Mr. FORSYTHE. The number of investigators was 879. Now we have 939.

Mr. SPROUL. Sir, that basically concludes our summary.

INVESTIGATIONS BY CATEGORY

Senator RUDMAN. Let me ask you a few questions because I am somewhat familiar with investigations.

First give me some flavor of the kind of investigations that you do by category.

Mr. SPROUL. We would do what is called a background investigation, a standard background investigation. We are talking about a 5-year scope, records check, local agency check, and credit. We would also do an SBI, special background investigation. The scope is extended to 15 years with some small variations, additional neighborhoods and things of that nature. We would have a national agency check for a secret clearance action. Then there would be some bring-ups in the two categories I mentioned previously.

Senator **Rudman**. Let's talk about the category people and the positions they are going to hold if your agency has to do investigative background work. Obviously we start off with people that are applying for clearances in one way or another. Let's talk about the industrial community as well as the military.

Mr. **Sproul**. I am not sure I understand the question.

Senator **Rudman**. If a contractor is going to hire some engineers that are going to work on a particular program, I expect that in many cases you have to do the background clearances for those. Is that correct?

Mr. **Sproul**. They would come through the Defense Industrial Security Office and the request is based upon the level that is determined by them. We do not determine the levels.

Senator **Rudman**. If a new member of the staff of this committee needs a clearance, do you do that?

Mr. **Sproul**. Yes, sir.

CLEARANCE INVESTIGATIONS

Senator **Rudman**. I assume you do all of the various clearance investigations for people within the Armed Forces or are those done by the agencies within those armed services?

Mr. **Sproul**. We do for the three services and the Department of Defense. We do all of them.

Senator **Rudman**. I assume that there are a number of levels, as there are security levels, of investigations that you do. Obviously the special investigations you spoke of, 15 years, would apply to someone who is getting a very sensitive kind of clearance as opposed to someone who is let's say going to be working in a machine shop making a very classified product. That person would have a different type of a clearance. Is that correct?

Mr. **Larsen**. It is the level of access, yes, sir. The basic secret clearance in industry is based upon a national agency check, sir.

Senator **Rudman**. Am I correct in saying that that is the lowest level of security that you have to check for?

Mr. **Sproul**. That we would investigate for, yes.

Senator **Rudman**. That is opposed to someone on this committee for instance that would need to have access to the most highly classified briefings for the Defense Nuclear Agency or the CIA. That would be the highest level of clearance, is that correct?

Mr. **Sproul**. That is special access intelligence information, yes, sir.

Senator **Rudman**. What percentage of your investigations are done in the area of the lowest level of access? What percentage of those 200,000 and some odd would be at the lowest level of access based on your most recent experience?

Mr. **Forsythe**. The lowest is the secret clearances and it is done by a national agency check. That is not included in the 201,000.

Senator **Rudman**. What is included?

Mr. **Forsythe**. All of our what we call field investigations which would require field work, sir. These would be the standard background, special background, and the bring-up investigations.

Senator **Rudman**. That is for what level of clearances?

Mr. **Forsythe**. For top secret and also the Compartmented Intelligence which would require the SBI, sir.

Dr. **Taylor**. We count out NAC's separately and they run in the range of 900,000 or so per year as opposed to the 201,000.

Senator **Rudman**. I think what I am trying to get at here is taking all of your assumptions, then you have a problem. You do not control the assumptions. You carry out tasks.

Mr. **Sproul**. True.

ABUSE OF AGENCY SERVICES

Senator **Rudman**. Is there any concern in your agency that we are going after security clearances in areas that maybe we do not have to? Is there a concern that we are clearing people and engaging the efforts of your agency for positions which really do not need the kind of work that you are doing, that maybe a national agency check would suffice? But all someone has to do I suppose is put down the request, and you have to carry it out. Is there any feeling within your agency that maybe your services are being overused or, to put it another way, abused?

Mr. **Sproul**. We emphasize at every opportunity throughout industry and the services the very subject that you mentioned. But as you indicated, sir, we have not control.

Senator **Rudman**. Rather than having the Deputy Secretary say we have to get more and more, theoretically if all of the users suddenly were to decide they wanted to be even more secure than they are now you could have 800,000 cases next year and there is nothing you could do about it.

Mr. **Sproul**. There has been not only in our behalf, but considerable emphasis, sir, in the Department of Defense to go to the agencies. In our agency itself as an example, we have just reviewed the need for clearances for our people at different levels and have cut back. Yes, sir, that is an ongoing concern and a review.

Senator **Rudman**. Is this the subject of as much attention over there in the Defense Department as your request here this morning for obviously what is going to have to be a very heavy supplemental? In other words are they looking at the security end of things as to how secure they really have to be as compared to solving it with more investigators?

INDUSTRIAL SECURITY PROGRAMS

Mr. **Larsen**. From the industrial security program standpoint, sir, it is a continuing monitorship by our representatives in the field that contractors absolutely justify their requirement. That is continually supervised. Of course as in any case it is not absolutely 100-percent accurate, but it is certainly 99-percent accurate that we are not clearing more people than are required in the industry program.

As far as the DOD agencies, that is another subject.

Mr. **SPROUL**. There has been considerable correspondence from OSD to the services as I said emphasizing that concern.

WORKLOAD REQUIREMENTS

Senator **RUDMAN**. I am not sure you are the right person to answer the question, but I am going to talk to staff about maybe getting something from the Department of Defense to tell us what they are doing to lessen your workload requirements.

There are two ways to solve your problem. One is to give you 2,000 investigators which if you take it empirically would take you down to 63 days. The other way is to lessen your requirements. Probably somewhere between the two is the truth as to what we need to do.

MAN-DAYS REQUIRED FOR LOWEST LEVEL CHECK

I have another question for you. How many man-days does it take to complete the average lowest level of access check that you do at the industrial level and then at the military level?

Mr. **LARSEN**. Secret national agency checks are running 78 days.

Senator **RUDMAN**. Is that workdays?

Mr. **LARSEN**. No, that is calendar days.

TIME REQUIRED TO COMPLETE SECRET CLEARANCE INVESTIGATION

Senator **RUDMAN**. I want to know how many hours does it take of an investigator's time to get person A a secret clearance.

Mr. **FORSYTHE**. In this case again, sir, the NAC is an inquiry of the national records of the FBI, State Department et cetera, which is highly mechanized.

Senator **RUDMAN**. I am sorry. I probably did not state the question correctly. I am talking about what is required beyond the national agency check. You are now moving out in the field, and you have to do a 5-year background. How many workdays or hours or however you define that, what is the time that that takes?

Mr. **SPROUL**. Last week our total average, as I indicated, was 162. I think we will have to supply you the information for the record.

Senator **RUDMAN**. That is to finish it.

Mr. **SPROUL**. Yes, sir.

Senator **RUDMAN**. That is not my question. Obviously it comes into the office on day one. Maybe it is day 137 before the investigator gets to it and it takes him 21 days to do it. I am asking: Once he or she starts working on this project, how long does it take? I assume that they do several at the same time because if they have nine people to check in Syracuse, N.Y., then they check on all nine. They do not make nine separate trips.

Dr. **TAYLOR**. Sir, we do not have that information. We will have to provide it for the record.

Senator **RUDMAN**. I would like that information. I would like to see how productive they are. I would like to see how long it takes to do this type of investigative work.

PRODUCTIVITY

Dr. **Taylor**. If I may I would like to comment on the productivity. Over the last several years our average increase in productivity in terms of leads per agent per month, which is the figure we use to measure it, has gone up an average of in excess of 5 percent per year in each of the last 3 fiscal years.

But we will supply an answer for the record.

[The information follows:]

Personnel Security Investigations

The average personnel security investigation (PSI) case requires 15.5 investigative leads by 3.3 different field offices. The investigative leads are assigned to the field offices by Action Lead Sheets (ALS). The average ALS is received in the field offices on the 11th day after the request for an investigation is received at the Personnel Investigations Center (PIC) at Ft. Holabird, Maryland. About 8 days are required for initial processing of the request at the PIC, and 3 days for mailing the ALS's to the field offices, 3 days for mailing reports of investigations from the field to the PIC and 4 days for the review and closing of the case at the IC. The remainder of the time is required by the field.

The average agent completes the equivalent of one ALS (5.1 leads) in about half a day. It is not possible, however, to say how much time an agent spends on individual ALS's because the various leads on ALS's are conducted at different times, and this information is not recorded in our reporting system. The scheduling of leads depends upon many factors including the priorities of pending ALS's, location of the leads and especially the backlog of pending leads. In most cases, the "first-in-first-out" rule cannot be applied. Agents normally pursue several leads from several ALS's simultaneously. If the agent has a single lead in a location, that lead is held for a period of time in anticipation that other leads will be received for that location. It is not efficient or economical to pursue single leads at locations. In other instances an interviewee, an official having custody of a record, etc., may not be available and the agent may have to wait for a period of time before making contact.

WORK APPROACH

Senator **Rudman**. The last question I have is one of work approach. If you have one of your investigators assigned to investigate the background of person X, a 5-year investigation for a secret clearance either in the industrial community or in the military, that investigator goes up and does that and somewhere along the line runs into a red flag. There is a problem with that investigation.

My question is: Does that same investigator then follow that to a conclusion? Or do you have a centralized place where those problem investigations are carried on by people who have that sole responsibility, because those, of course, are quite different from the normal routine investigations you are doing?

Mr. **Sproul**. That agent would normally follow it through to its conclusion unless it is outside of his area of jurisdiction. Then he would forward it to a central office, to another office.

AREA OF JURISDICTION

Senator **Rudman**. What do you mean, outside of his area of jurisdiction?

Mr. **Sproul**. An agent is given an area of responsibility.

Senator **Rudman**. Do you mean a classification area, geographical area?

Mr. **Sproul**. It is a geographical area of responsibility.

Senator **Rudman**. So, if you were going to get a clearance for me and I had lived in New Hampshire, Colorado, and Florida in the last 5 years, that file would be first done in New Hampshire and then it would go to Colorado and then it would go to Florida?

Mr. **Forsythe**. It would be done simultaneously.

Senator **Rudman**. It would be assigned to three different agents?

Mr. **Forsythe**. Yes.

Senator **Rudman**. And if any one of those agents ran into a serious problem, say I belonged to some organization that was of a very suspicious nature, then that agent in that area would follow that through until he or she found the information that was felt necessary.

Mr. **Forsythe**. In that area, yes, sir.

Senator **Rudman**. Essentially what can happen then is that with any of these people, let's say the workload of any particular agent is 30 or 40 cases simultaneously or more that he or she is working on, which I suspect is probably not unreasonable to assume, and the agent runs into a particular area on a particular investigation; then every other case that that agent is working on is held up until he or she is able to finish that investigation, I assume.

Mr. **Sproul**. That is true.

CAUSES OF CASE BACKLOGS

Senator **Rudman**. Let me submit to you that I would like very much to sit down and talk to you about that, not particularly for the record. I have seen investigators who had broad-ranging responsibilities get so occupied with one particular case that it caused an enormous backlog.

I am not saying that that is going to solve your problem. But these routine investigations ought to be able to move along at a more rapid rate, as the mechanized ones do. If your investigators run into lots of problems with some of these backgrounds, then obviously everything else gets held up. I wonder if you can kind of divert some of that. I would like to talk to you about it.

Mr. **Sproul**. Certainly that would be a supervisory responsibility to see if a man was getting in trouble in a certain area. By necessity he would redirect these cases to other agents.

Senator **Rudman**. Is that standard operating procedure?

Mr. **Sproul**. Yes, it is, sir.

Senator **Rudman**. So that agent would not necessarily get off the case, but would then divest himself or herself of those other cases being worked?

Mr. **Sproul**. That is true. Or he may receive help from another agent if the incident involved is of such a nature that it requires assistance.

Senator **Rudman**. The reason I am asking you so many questions, Mr. Sproul, is because, looking at the Defense budget and where it is going and particularly where it is going to impact on the industrial community, I think if you follow everything along, the way you are saying that, your figures are not the worst case. They may be the best case.

If some of the procurement programs that we are talking about go through with the kind of employment that will result in areas that are highly classified, then you may find that by the time the investigators complete the background the weapons systems are going to be obsolete. I think we are going to have to find a way to deal with that.

Mr. SPROUL. I hope our delays will not be that serious.

Senator RUDMAN. I would like very much to have the staff check the aspect of how these classifications are arrived at. There has been some concern. We get things presented to us at closed briefings sometimes that say classified on them and secret and even top secret which I have read about in Popular Mechanics 3 weeks before. So I wonder about the efficacy of some of the systems.

Is there anything else that you want to add this morning?

Mr. SPROUL. No, sir.

Senator RUDMAN. That is other than your lamentable statement?

Mr. SPROUL. I can go over it again. [Laughter.]

SUBMITTED QUESTIONS

Senator RUDMAN. Thank you, Mr. Sproul. The subcommittee staff has compiled additional questions which we will ask you to answer for the record.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR STEVENS

Senator Stevens: Mr. Shycoff please elaborate on the inflation assumptions used in the development of these estimates.

Answer: The assumptions used to determine the amount of inflation in the Operation and Maintenance, Defense Agencies appropriation are consistent with the assumptions used to price inflation in all the operation and maintenance accounts. Purchased utilities are estimated to increase by 15% in FY 1982 over FY 1981. Price growth in the fuel and non-fuel stock fund areas reflect pricing charges that the stock funds will charge their customers. The inflation rate for other purchases was estimated at 8.4% in FY 1982 over FY 1981.

SAC Hearing of Defense Agencies FY 82 O&M Request

Senator Stevens:Since FY 1979, OSD has experimented with the Joint Recruiting Advertising Program (JRAP) as a means to improve military recruitment efforts. Over $10 million is requested to continue the program in FY 1982. However, the active services and reserves are requesting over $150 million for specific service or reserve recruitment advertising. Since the inception of JRAP has there been any discernable decrease in the level of active service and reserve advertising?

Answer: The Joint Recruiting Advertising Program was initiated to effect cost efficiencies in those areas of advertising that were common to the Services (i.e. awareness advertising and to some extent lead generation advertising). Joint advertising has focused on preparing the youth market and their influencers by making them aware of the opportunities and benefits of military service. This has allowed the Services to place emphasis on advertising Service-unique programs and benefits. Without the joint advertising program the Service advertising budgets would have grown by an additional 5 to 10 million dollars.

In an effort to achieve further economies within the DoD advertising budget, the Secretary of Defense has taken action to reallocate Service advertising resources and double the present size of the joint advertising program (active force enlisted) planned for FY 1982.

Senator Stevens: Roughly one third of the FY 1982 request for OSD functions is for contract studies and analyses. Does the nature or volume of the contractual effort preclude in-house accomplishment?

Answer: No. The Department of Defense undertakes external studies to provide a factual and analytic base of aiding in decision-making, and to assess the effectiveness of existing policies, programs and practices. These studies are performed by outside contractors to enable the Department to take advantage of: special areas of expertise neither available or necessary on a full time basis within the Government; broad industrial and academic talent; and experienced professionals no longer available for Government service. In addition, studies are performed by outside contractors to aid in discriminating among competing bureaucratic interests so that a reasonable degree of objectivity and expertise can be brought to bear on issues and problems facing the Department. It is for any one of these reasons or combination of them that OSD is undertaking these studies in FY 1982.

Office of the JCS

Senator Stevens: Estimates for Standard Level User Charges for OJCS have dropped in FY 1982 in sharp contrast to other O&M requests. Have requirements declined for services which are standard level user changed?

Answer: Prior to the budget submission each fiscal year GSA provides a rate structure by type of space for Standard Level User Charges (SLUC). While requirements for SLUC services have not declined, in FY 1981 an overpricing error was made in the categories of parking space and special structural change space which accounts for the decrease in FY 1982 SLUC cost estimates. Other OJCS O&M requirements have remained relatively constant except for anticipated price increases.

Senator STEVENS: What effect has the present physician shortages had on CHAMPUS services? What measures, if any, is CHAMPUS adopting to accommodate the physician shortage?

ANSWER: The major effect is that a growing number of beneficiaries who formerly obtained only a few of their medical services from civilian sources under CHAMPUS now must rely on those sources for essentially all of their medical care needs. There has been no significant change in the number of different CHAMPUS users over the past few years, but the greater degree to which the users must rely on civilian sources is shown by a 7 percent increase in the number of CHAMPUS claims from Fiscal Year 1979 to Fiscal Year 1980.

OCHAMPUS has focused its responses in two areas. In the first area have been all possible administrative improvements. Examples are the significant and continuing progress in the promptness with which claims are paid, and reductions in beneficiary reporting burdens to the degree the law allows. OCHAMPUS has helped the Uniformed Services test the use of civilian physicians to provide care at military facilities. In the second area are ongoing efforts to reduce the disparity between the range of benefits and the beneficiary financial liabilities under CHAMPUS when compared to those when care is obtainable from Uniformed Services medical treatment facilities. The addition of well-baby care to CHAMPUS benefits is one example. An initiative to add to CHAMPUS the eye examinations that may be provided by Uniformed Services facilities typifies a number of such changes advocated but held in abeyance because of higher DoD priorities at the present time. There has been an increase in the level of payments to physicians and other individual providers and further increases are being supported to reduce beneficiaries' liabilities. Other initiatives to move toward equalizing the beneficiary liabilities under CHAMPUS and those incurred in Uniformed Services medical facilities are pending DoD priority decisions. In brief, OCHAMPUS moved quickly to accomplish all positive steps that are within its administrative prerogative, and has advocated legislative changes where such changes would soften the adverse impact on the beneficiaries from the reduced access to care from Uniformed Services facilities.

Senator STEVENS: Please describe the current plan for implementing dependent dental care. How much is the estimated cost for Fiscal Year 1982?

ANSWER: OCHAMPUS has been working in the following areas to prepare for a dental program:

A. Developing a Request for Proposal (RFP).

B. Developing a claim form.

C. Evaluating and modifying existing contractor instructions for use in a dental program.

D. Assessing OCHAMPUS staffing and ADP needs.

E. Preparing a provider/beneficiary education package to announce the program.

F. The development of a procurement schedule.

Once OCHAMPUS receives positive indication of a dental bill passing, but prior to passage, we will:

A. Host a pre-solicitation conference for potential dental contractors.

B. Prepare a bidders list.

C. Solicit system descriptions from interested bidders.

D. Perform on-site reviews to evaluate contractor capabilities.

E. Rank contractors.

Once legislation is passed:

A. If 8 months or more is allowed between passage and implementation, a full competitive effort will be followed.

B. If 6-7 months is allowed we will follow a limited procurement.

C. If 5 months or less is allowed we will sole source the contract.

It is anticipated that OCHAMPUS will be forced to sole source the contract. We plan to use one contractor (an existing dental claims processor) under a one-year cost contract to be later let on a fixed-price contract basis.

Concurrently with contracting activities, OCHAMPUS and the Military Services will be jointly carrying out a nationwide education program for providers and beneficiaries.

A dental claim form patterned after the American Dental Association (ADA) Uniform Claim Form has been developed and will be distributed.

Eligibility for active duty dependents will be determined by the Defense Enrollment Eligibility System (DEERS).

Estimated cost: Approximately $100M for six months, $200M for a full year. Cost is based on a proposal with government payments of 100% of preventive services, 80% of basic restorative services, and 50% of other services. Proposal includes an annual maximum of $1,000 for other than preventive and orthodontic services, and a separate lifetime maximum of $1,000 for orthodontic services.

CHAMPUS

Senator Stevens: For what reasons does DoD propose to eliminate CHAMPUS reimbursement of residential training centers? What effect will this policy change have on the proposed FY 1982 budget request? Can we expect additional savings to be generated from this policy change?

Answer: The Department of Defense decision to propose termination of Residential Treatment Centers (RTCs) for admissions on and after 1 October 1981 came from a policy review by DoD Health Affairs. The review was prompted by Defense Department concern about continuing problems with this type of facility and the realization that a majority of cases being admitted to RTCs were not of a level or type for which CHAMPUS benefits were intended.

As indicated, the impetus for proposing this change was not fiscal. Current indications are that for FY81, RTCs will cost CHAMPUS about $15 Million. Terminating benefits for RTC-level care will not result in saving this amount, however, because some of these cases can be expected to be placed in psychiatric hospitals or undergo outpatient psychotherpy. For fiscal year 1982 no savings are anticipated since CHAMPUS residents who are in an RTC on October 1, 1981 will continue to receive benefits for up to a year. The Department of Defense is currently preparing a five year cost/savings impact analysis of this proposed change.

Senator STEVENS: $1.007 billion is requested in the revised Fiscal Year 1982 budget. How much of this represents program growth and how much represents inflation? What rate of inflation have you used?

ANSWER: The $1.007 billion represents the original CHAMPUS budget request submitted for Fiscal Year 1982. The Fiscal Year 1982 request included an increase of $105.8 million over the Fiscal Year 1981 cost for benefit payment and administration costs. The distribution of the $105.8 million is $72.8 million for inflation and $33.0 for program growth. An expected inflation rate of 8 percent was used in the CHAMPUS figures.

The revised CHAMPUS Fiscal Year 1982 budget has been reduced to $968.7 million.

Senator STEVENS: Please provide a detailed breakout of the proposed Fiscal Year 1982 budget according to major accounts.

ANSWER: The breakout of the Fiscal Year 1982 Revised CHAMPUS Budget by major account is:

EOE Break	($000)
Personnel Compensation	5,427
Travel & Transportation	536
Transportation of Things	97
Rent, Communications, Utilities	988
Printing and Reproduction	2,713
Other Services	958,513
Supplies	313
Equipment	77
Total	968,664

Senator STEVENS: In a February 1981 GAO report entitled "Performance of CHAMPUS Fiscal Intermediaries Needs Improvements", 22 recommendations to the Secretary of Defense were made. What is DoDs response to this report, and which of the recommendations are now being effected? How long will it take for DoD to implement all the GAO recommendations it has accepted? What is the anticipated cost/savings of implementing these recommendations?

ANSWER: OCHAMPUS has formally concurred in 20 of the 22 recommendations made by GAO. These recommendations have been implemented or are in the process of implementation. Total implementation will be completed in July 1983 when all CHAMPUS Fiscal Intermediaries are under new contracts.

The majority of the recommendations suggested by GAO are designed to provide increased program and administrative controls as well as enhanced service to beneficiaries and providers. Due to the nature of the recommendations, many will result in administrative cost increases as opposed to cost savings.

The only recommendation expected to create cost savings is the implementation of the Letter-of-Credit system. This is expected to result in a savings to the U.S. Treasury of approximately $1 million.

Senator Stevens: Is it the policy of DLA to continue the backlog of maintenance and repair at the 1981 level? Please provide more detail on the extent of the backlog and provide an estimate of funding required to eliminate the backlog.

Admiral Grinstead: It would take approximately $20.1 million to eliminate our backlog. It is, however, not a good idea to eliminate the backlog. Approximately 20% of the annual requirements for maintenance and repair is generally regarded as a manageable level consistent with good management practices and that is the level at which we intend to maintain the backlog.

OTHER PURCHASED SERVICES, UTILITIES AND RENTS

Senator Stevens: Estimated increases for other purchased services seem to fluctuate for all O&M accounts. DCA estimates that other purchased services costs will increase over $13 million in FY 1982. What factors contribute to these accelerated cost increases?

Similarly, the FY 1982 estimates for utilities and rents almost double from FY 1981. Is this growth inflationary, or attributed to some DCA unique practices?

Answer: The factors which primarily contribute to the cost increases in "other purchased services" are the additional mission requirements placed on the agency such as Presidential Directive 53.

DCA's estimates for utilities and rents increased by 10.1% from FY 1981 to FY 1982. This growth is inflationary and is within guidelines furnished by OSD. When you consider the total DCA object class 23, that is all rent, communications and utilities, the addition of the new communication protection program and communications requirements of Presidential Directive 53 bring the requirement to nearly double FY 1981.

LONG-HAUL COMMUNICATIONS

Senator Stevens: Please elaborate on long-haul communications increased requirement in FY 1982.

Answer: The large increase in Operation and Maintenance for long-haul communications is for the new communications protection program, $10.6 million; support of Presidential Directive 53 initiatives, $14 million; and the remainder is for price growth.

WWMCCS AND DCS SUPPORT

Senator Stevens: Please provide further justification for the increase of $5.9 million required for Worldwide Military Command and Control System (WWMCCS) support. Similarly, expand on the requirement for the increase of $1.2 million for operational support of the Defense Communications System (DCS).

Answer: We will continue day-to-day ADP and technical support to the NMCS/OJCS/OSD and must expand to meet new requirements of a changing political/military environment and improve capacity and processing time for interactive functions so as to be more responsive to the decision processes. We will also increase efforts in areas of tactical warning, NATO exercise preparation and evaluation, force status, operational and logistic/mobility planning, and continue efforts for an integrated ADP system and capabilities between the Pentagon and the Alternate National Military Command Center (ANMCC).

The increase of $1.2 million for the Defense Communications System is for the operation and maintenance of the satellite communication control facilities at Sunnyvale, California, and Fort Detrick, Maryland, and the necessary control circuits to support the launches of the first two Defense Satellite Communications System Phase III communications satellites.

OTHER CONTRACT SERVICES

Senator Stevens: Please provide more information on the types of "other contract services" managed.

Answer: "Other contract services" managed by the DCA include maintenance service contracts for government-owned equipment, stenographic services, storage of household goods associated with permanent change of station, recruiting, advertising, alterations and repairs to buildings and equipment, and operation of facilities.

Support of the Rapid Deployment Force

Senator Stevens: A major program acceleration at DMA for FY 1982 is heightened support for the RDF. An additional $2.7 million is requested to finance DMA's support role. Please describe the types of functions which dictate that workload will be increasing.

Answer: The DMA workload is increasing because of the need to meet urgent RDF requirements which are focused on the Persian Gulf region, while simultaneously supporting high priority strategic requirements, such as those for the cruise missile, which are focused on other areas of the world.

Before the RDF was established in early 1980, the requirements for large scale maps and charts of many RDF contingency planning areas had not been designated as of high priority to the strategic interests of the United States. Consequently, DMA had not scheduled those products for production in the near term.

With the establishment of the RDF, the requirement was levied on DMA to accelerate the production of large scale maps and charts and point positioning data bases for the contingency planning areas. The currently identified requirements consist of some 5,800 map and chart products and 930,000 square nautical miles of point positioning data bases. The work involves providing first-time coverage for many areas and updating existing products for currency and accuracy.

DMA has committed resources, including the manpower associated with the cited $2.7 million increase, which with some assistance from collaborating countries, will permit us to have all these urgently needed products completed and into the distribution system by the end of fiscal year 1986.

JOHNSTON ATOLL OPERATIONS

Senator Stevens: DNA requests $4.0 million to repair the runway at the Johnston Atoll nuclear test facility. Please describe the organizational relationship between DNA and the Department of Energy with regard to the operation of Johnston Atoll. What aspects of base operations support and real property maintenance will be assumed by DoE?

General Griffith: Acting for the Department of Defense, the Defense Nuclear Agency (DNA) retains Johnston Atoll (JA) in a caretaker status. DNA controls operations via an on-site command detachment. Under the Economy Act of 1932, DNA obtains contractor services from the Department of Energy for all normal aspects of base operations support and real property maintenance. DOE will not assume any responsibility for base operations support or real property maintenance of active facilities.

Senator Stevens: What types of services are performed by contractors at Johnston Atoll? Please elaborate on the specifics of the contracts at this facility.

General Griffith: The DoE contractor on Johnston Atoll, Holmes & Narver, Inc., performs all normal Operations and Maintenance (O&M) services required at this isolated location for life support of assigned personnel. Types of services include the operation of the power plant, water distillation plant, post office, airfield, etc., which would routinely be provided at an isolated location. The Defense Nuclear Agency reimburses DoE by Interagency Cost Reimbursable Order (IACRO) for services provided.

The USAF 1957th Communications Group has a separate contract with Lear-Sigler, Inc., to provide all base communications support.

SITE CHARACTERIZATION PROGRAM

Senator Stevens: A nuclear weapons site characterization program was initiated in FY 1981. General, would you tell us a little more about this program?

General Griffith: (Deleted).

Productivity of DIS Agents

Senator Stevens: DIS estimates that the average personnel security investigation completion time for FY 1982 is 124 days as opposed to 93 days in FY 1980. Although the end of year cases pending are scheduled to decline in FY 1982, 25% more work years will be required, as compared to FY 1980, to accomplish this objective. What factors have contributed to this apparent erosion of productivity in personnel security investigations?

Mr. Sproul: Actually there is no deterioration in productivity. The number of cases pending tells us where we will be at the end of the year but it does not tell us how much effort will be expended during the year. Leads completed tell us how much effort will be expended during the year. During FY 1980 we completed 2,425,567 investigative leads with 851 agent work years for a productivity rate of 237.4 leads per agent per month. During FY 1982 we estimate that we will complete 3,025,400 investigative leads with 1,062 agent work years for a productivity rate of 237.4 leads per agent per month. The fact that the end of year cases pending are scheduled to decline is directly attributable to the increase in investigative leads completed during the year, which is made possible by the increase in agent work years.

DoD Initiatives

Senator Stevens: Your budget reflects a steady deterioration of productivity and efficiency in accomplishing workload. What steps has the Department taken to assist DIS in bringing down the length of time to complete investigations? Has any thought been given to redefining the scope of the requirements for DIS investigations? Are there any initiatives pending which should be considered in addition to the factors upon which this budget is based?

Mr. Sproul: While DIS indeed takes longer now to complete background investigations than in the past, this is primarily due to a steadily increasing workload and a decrease in personnel authorizations. DIS productivity (leads per agent per month) actually increased by more than 5% in each of the last three fiscal years. The Department of Defense has implemented numerous significant policy initiatives since 1974 to date to reduce DIS investigative completion time.

For example:

- In 1975 the scope of Bring-Up investigations was reduced from a full background investigation to a National Agency Check, Local Agency Check and Credit Check.
- Background Investigation coverage was reduced from 15 to 5 years.
- Single scope Special Background Investigation was implemented for all Special Access Programs.
- Command identification codes were developed to ensure investigative requests are authorized.
- Automated clearance retrieval system was implemented to promote reciprocal acceptance of security clearances.

A more comprehensive listing of DoD initiatives has been presented to the Subcommittee. These steps have been instrumental in avoiding even further deterioration of DIS investigative times.

Considerable emphasis has repeatedly been placed on requesters limiting their investigative requests to the minimum necessary for operational requirements. DoD has implemented a security oversight program consisting of periodic visits to component installations to check on compliance with this as well as other program requirements. A quota system for investigative requests has also been under consideration for some time and may be implemented in the near future in order to help DIS achieve reduced case completion times. Additionally, in June 1981, Deputy Secretary of Defense Carlucci directed implementation of several policy initiatives designed to assist DIS. These include:

- A moratorium on all Periodic Reinvestigations
- Elimination of Background Investigations for SECRET Clearances.
- Conduct Personnel Interview-Oriented Background Investigation in lieu of the traditional BI.
- Augmentation to DIS from the military services and retired investigators.

Additional Civilian Positions for DIS Activities

Senator Stevens: An additional 313 civilian positions were added in FY 1981 for DIS activities. Aside from the transfer of the Industrial Security Program, what necessitated this increase?

Mr. Sproul: Of the additional 313 positions 88 were for Industrial Security and 225 were for Personnel Security Investigations

(PSI). The PSI positions were provided to address expansion of the PSI workload. This expansion has produced unacceptable increases in the time required to complete investigations. The additional positions permitted the projection of a 124 day completion time in FY 1982 in lieu of a 189 day time if the resources were not provided. The 124 day completion time was almost double the Department of Defense long range goal of a 65 day completion time for investigations. However, as pointed out in my opening remarks, the situation has deteriorated since the budget was submitted. The need for the 225 PSI spaces is even greater. Even if the funds requested in the budget are approved, the average completion time for FY 1982 would be about 147 days or about 2¼ times the Department of Defense long range goal of 65 days.

Increase In Industrial Security Workload

Senator Stevens: Obviously DIS feels that the Industrial Security Program was understaffed by DLA. An additional 88 civilian end strength were provided in FY 1981. What factors have contributed to the increased number of industrial security surveys and investigations required?

Mr. Sproul: The number of Industrial Security surveys and inspections required has not risen appreciatively from FY 1980 (21,281) to that which is projected for FY 1981 (21,300). However, the number of slipped inspections has risen significantly and is now projected to be 2,900 by the end of FY 1981 as compared to 878 existing at the end of FY 1980. Not only was the Industrial Security Program understaffed when administered by DLA, quality efforts had diminished considerably. Under DIS, emphasis has been placed on quality, not quantity and hence the increased number of slipped inspections. With the additional personnel authorized, it is projected that a full quality effort will be evident in FY 1982 after recruitment and training is accomplished. This should result in the number of slips decreasing to 500 in FY 1982 and further reduced to 200 in FY 1983.

Increase In Non-Personnel Costs

Senator Stevens: The FY 1982 estimate for DIS "Other Purchased Services" is more than double the FY 1980 actuals. Similarly, the DIS projection of costs "for travel and transportation of personnel" accelerated for FY 1982 far beyond the marginal FY 1980 level of operation. Please provide further justification for this increase.

Mr. Sproul: During FY 1980 DIS obligated $1.470 million for "Other Purchased Services". For FY 1982 it is estimated that DIS will obligate $3.355 million, or an increase of 1.885 million. This increase is caused by three developments: the cost of inflation ($.289 million); costs associated with the additional spaces ($.122 million); and the transfer of the industrial security mission (1.474 million). During FY 1980 DIS obligated $.564 million for "Travel and Transportation of Personnel". For FY 1982 it is estimated that DIS will obligate $2.742 million, or an increase of $2.178 million. This increase is caused by three developments: the cost of inflation ($.066 million); training, temporary duty travel (TDY), and permanent change of station (PCS) costs associated with the additional spaces ($1.103 million); and the transfer of the industrial security mission ($1.009 million).

Industrial Security Activities By Location

Senator Stevens: Please provide a list of the Industrial Security Activities by location and a breakout of this subactivity by element of expense.

Mr. Sproul: The list of Industrial Security Activities by location is as follows:

ACTIVITY	LOCATION
Directorate for Industrial Security	Alexandria, VA
Defense Industrial Security Clearance Office	Columbus, OH
Defense Industrial Security Institute	Richmond, VA
Office of Industrial Security International	Brussels, Belgium
Regional Office	Boston, MA
Field Office	Boston, MA
Resident Agency	Providence, RI
Field Office	Waltham, MA
Field Office	Hartford, CT
Resident Agency	Wallingford, CT
Resident Agency	Groton, CT
Field Office	Bridgeport, CT
Field Office	Syracuse, NY
Field Office	Buffalo, NY
Regional Office	Philadelphia, PA
Field Office	Philadelphia, PA
Field Office	Pittsburgh, PA
Field Office	Reading, PA
Field Office	Newport News, VA
Regional Office	New York, NY
Field Office	New York, NY
Field Office	Springfield, NJ
Field Office	Garden City, NY
Regional Office	Alexandria, VA
Field Office	Baltimore, MD
Field Office	Washington, DC
Regional Office	Chicago, IL
Field Office	Indianapolis, IN
Field Office	Chicago, IL
Field Office	Milwaukee, WI
Field Office	Cleveland, OH
Field Office	Cincinnati, OH
Field Office	Dayton, OH
Field Office	Detroit, MI
Regional Office	St. Louis, MO
Field Office	St. Louis, MO
Resident Agency	Kansas City, MO
Resident Agency	Cedar Rapids, IA
Field Office	Denver, CO
Resident Agency	Colorado Springs, CO
Field Office	Twin Cities, MN
Regional Field Office	Atlanta, GA
Field Office	Orlando, FL
Resident Agency	Clearwater, FL
Resident Agency	Ft. Lauderdale, FL
Field Office	Birmingham, AL
Field Office	Atlanta, GA
Resident Agency	Huntsville, AL
Resident Agency	Eglin AFB, FL
Field Office	Pascagula, MS
Resident Agency	Charlotte, NC

Industrial Security Activities By Location

ACTIVITY	LOCATION
Regional Field Office	Dallas, TX
Field Office	Oklahoma City, OK
Field Office	San Antonio, TX
Resident Agency	Austin, TX
Resident Agency	Houston, TX
Field Office	Phoenix, AZ
Resident Agency	Albuquerque, NM
Regional Field Office	San Francisco, CA
Field Office	San Francisco, CA
Resident Agency	Oakland, CA
Field Office	Salt Lake City, UT
Field Office	Menlo Park, CA
Field Office	Seattle, WA
Regional Field Office	Los Angeles, CA
Field Office	Los Angeles, CA
Field Office	VanNuys, CA
Resident Agency	Santa Barbara, CA
Resident Agency	Pasadena, CA
Field Office	Santa Ana, CA
Resident Agency	Ontario, CA
Field Office	San Diego, CA
Resident Agency	Honolulu, HI

The element of expense breakout for the Industrial Security Activity is as follows:

Element of Expense	FY 1982
Civilian Personnel	$16.996 million
Travel & Transportation of Personnel	1.009
Transportation of Things	.088
Utilities & Rents	.416
Communications	.101
Purchased Equipment Maintenance	.006
Printing & Reproduction	.247
Other Purchase Services	1.474
Supplies & Materials	.244
Equipment	.052
	$20.633 million

Senator Stevens: Further expand upon the $42.0 million Korean Equipment Upgrade (P.E. 62711E) proposed for FY 1982, and the specific initiatives to be undertaken in the following areas:

(1) Indications and Warning,
(2) Target Acquisition, and
(3) Hard Structure Munitions.

Dr. Fossum: The North Koreans are now the predominate military power on the Korean peninsula. (Deleted).

The immediate proximity of such an impressive military force poised on a wartime footing requires that the U.S./South Korea be prepared to counter any military offensive (deleted).

The SORAK program will provide effective components to meet them. This initiative is supported by the Commander in Chief of U.S. Forces Korea (GEN Wickham) and the Commander in Chief, Pacific (Adm Long) as shown by the enclosed correspondence. Further, the initiative has received broad support from within the Department of Defense, including endorsement from the Secretary (enclosed), as important not only to Korea but also to other potential trouble areas such as the Middle East.

The SORAK program will implement near-term improvements in U.S. and ROK forces which will provide capability to react quickly and effectively to aggression. The program will consist of the introduction of advanced technology to improve indications and warning, targeting, communications, and hard structure munitions. Each system component, standing alone, will contribute significantly to the upgrade of the forces in Korea. In combination, these components will greatly increase the capability of these forces to provide intelligence and warning and to react quickly and decisively.

The Korean Upgrade consists of the following intelligence, warning, and targeting initiatives:

(1) Ground Netted Radar. An automated ground surveillance radar system which will provide 24-hour, all-weather surveillance (deleted).

(2) Pave Mover Airborne Radar. An advanced system which provides multiple modes for wide-area acquisition, small area moving target indications, and spot image to detect both moving and fixed targets (deleted).

(3) CELT. The CELT system will provide detection and location of threat emitters to distances up to (deleted) beyond the DMZ.

(4) Electro-Optical Camera. The Advanced Electro-Optical Camera System, which will have an infrared capability, will be employed to provide imagery data to depths of (deleted) beyond the DMZ

(5) Target Analysis and Planning (TAP) Center. The information collected by the above systems is integrated by the TAP located in selected headquarters. TAP uses the current information and pre-analyzed data bases to display vital information on map overlays and perform automated targeting analysis.

(6) Hard Structure Munition. (Deleted). The Germans demonstrated such a munition during World War II and recently, the Sandia Corporation has demonstrated such a capability for ballistic missile and air delivery. This program will develop and demonstrate such munitions for both air and artillery delivery for employment in Korea.

Each of the above initiatives have been so conceived that they work equally well in both the peacetime role of 24-hour surveillance and warning, and the wartime role of target acquisition. In peacetime the 24-hour surveillance provided by ground netted radar, CELT, and TAP would be augmented by use of the EO camera and Pave Mover. In wartime all assets would be used for highly effective targeting.

The intelligence, warning, and targeting systems are tied together with a dedicated survivable communications system, the Packet Radio. This system will allow transmission of all essential information to include selected facsimile imagery to all levels of command.

Completing the DARPA Korean Upgrade will be the development and demonstration of a hard structure munition (deleted).

DEPARTMENT OF DEFENSE
JOINT CHIEFS OF STAFF MESSAGE CENTER

PTTUZYUW RUHOSGG6219 1670159
PRIORITY
P 160041Z JUN 81

FM CINCPAC HONOLULU HI

TO COMUSKOREA SEOUL KOREA//J5//
SECDEF WASHINGTON DC//ISA/EAPR//
BT

UNCLAS
SUBJ: SHORT TERM IMPROVEMENTS-PROJECT SORAK
A. SSO KOREA 150045Z JUN 81
1. PER REQUEST IN REF A, THE FOLLOWING MESSAGE IS RETRANSMITTED.
QUOTE
100323Z JAN 81
M CINCPAC HONOLULU HI
TO SECDEF WASHINGTON DC//DARPA//
INFO COMUSKOREA SEOUL KOREA
JCS WASHINGTON DC//J5//
UNCLAS
SUBJ: SHORT TERM IMPROVEMENTS-PROJECT SORAK
. COMUSKOREA 081406Z JAN 81
1. SYSTEMS IDENTIFIED IN PARA 2, REF A, HAVE POTENTIAL TO ENHANCE NOT ONLY CFC FORCES, BUT OTHER PACOM FORCES AS WELL. SUPPORT ANY EFFORTS TO ACCELERATE DEVELOPMENT.
2. SUPPORT COMUSKOREA DESIRES FOR FIELD DEMONSTRATIONS OF SYSTEMS IDENTIFIED IN PARA 3. REF A. WILL ASSIST WHERE POSSIBLE IN COORDINATING TIMELY SCHEDULING OF THESE DEMONSTRATIONS.
UNQUOTE
BT

ACTION USDP(15) (7,F)
INFO SECDEF:(1) SECDEF(7)

MCN=81167/01498 TOR=81167/0205Z TAD=81167/0206Z CDSN=MAJ646

PAGE 1 OF 1
160041Z JUN 81

THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

23 JUL 1981

Honorable Ted Stevens
Chairman, Subcommittee on Defense
Committee on Appropriations
United States Senate
Washington, D. C. 20510

Dear Ted,

(Deleted).

(U) A fact sheet on this program is enclosed. If your committee desires, a briefing can be arranged through Dr. James Tegnelia at 694-2885.

Sincerely,

Enclosure: a/s

PARTICLE BEAM TECHNOLOGY

Senator Stevens: The $17.0 million increase in funding for Particle Beam Technology in FY 1982 is said to be needed to maintain program momentum and reach critical program milestones. Can you be more specific with respect to how this increase will allow DoD to extend theoretical research to help determine the feasibility of particle beam technology?

Dr. Fossum: The DoD instituted the Particle Beam Technology Program in FY 1981 in response to the Congressional guidance expressed in the FY 1980 House DoD Authorization Act. This consolidated program combines the efforts of DARPA and the Military Departments, under the overall technical direction of DARPA, with the objective of determining the feasibility of particle beam defense concepts (deleted). Under this program, DARPA has the responsibility for performing feasibility experiments for both charged and neutral particle beam concepts which have a wide range of potential defense applications including antiship missile, (deleted) and ballistic missile defense.

Charged particle beam research, which requires approximately (d) of the total budget, is focused on determining the feasibility of propagating (deleted) electron beams within the atmosphere over distances of up to (deleted). The key element of this effort is construction of the $42 million Advance Test Accelerator (ATA) at Lawrence Livermore National Laboratory. This device is essential for performing the final feasibility experiments at full atmospheric air densities (deleted). The charged particle beam research program also includes beam propagation theory, low-energy experiments, beam diagnostic development, and technology development.

Neutral particle beam research efforts were transferred to DARPA from the Army's Ballistic Missile Advanced Technology Center in FY 1981. (Deleted).

The Congress increased the FY 1981 DARPA budget for Particle Beam Technology from its original level of $20.3 million to $33.6 million in recognition of the importance of the objectives of the consolidated program. The increase of $17.0 million in FY 1982, for a total budget of $36.0 million, is essential to reach the critical program objectives which were initiated by Congressional approval of the final FY 1981 budget. The additional $17 million of FY 1982 funding will be applied as follows:

o Charged Particle Beams - $11 million

(Deleted).

o Neutral Particle Beams - $6.0 million

(Deleted).

These additional efforts are essential to maintain the program momentum established in FY 1981. They build on existing research efforts to provide a timely determination of the feasibility of these potentially high pay-off defense concepts. Without the additional FY 82 funding, milestones for charged particle beam research will be (deleted) delayed (deleted).

FY1982 Program Growth

Senator Stevens: Please elaborate on the FY1982 Program Growth of $2.2 million.

Answer: In FY1982 we are required to reimburse the Department of Labor for total benefits and other payments made from the Employees' Compensation Fund from July 1, 1979 to June 30, 1980 on account of injury or death of employees of the Office of the Secretary of Defense, Washington Headquarters Services, and other Defense activities. The FY1982 reimbursement represents a $.8 million dollar increase. We also anticipate a significant increase in our reimbursements to the U.S. Postal Service. Recent findings of the Review, Pieces, and Weights (RPW) Sampling System indicate an increase of $.9 million for FY1982 postal services. The remaining $.5 million of program growth fund increased requirements for rent of office equipment, ADP equipment, and reproduction equipment as well as the purchase of equipment currently leased where a "lease vs purchase" analysis indicates a purchase will be more cost effective.

Civilian Strength and Compensation Growth

Senator Stevens: Why has there been a 20% increase in Washington Headquarters Services civilian end strength since 1980? Further, Personnel compensation has migrated from $7.6 in 1980 to an estimated $21.2 million for 1982. Aside from pay raises and pay supplementals, what factors have driven this threefold increase in compensation costs?

Answer: There will not be a 20% increase in civilian end strength by FY1982. The FY1980 end strength figure of 326 represents actual on-board strength on 30 September 1980. The FY1982 figure of 385 includes 41 workyears for summer hire employees who will not be on-board at the end of the year. In regard to the increase in personnel compensation costs, our FY1982 request includes $7.0 million for General Services Administration guard services for Defense Department buildings throughout the National Capital Region which was a reimbursable program in FY1980 and $1.5 million for the Defense Agencies' senior executive service awards programs which became a requirement for the first time in FY1981. An increase of $1.4 million in reimbursements to the Department of Labor for Employees' Compensation Fund outlays for Office of the Secretary of Defense and Washington Headquarters Services employees also contributed significantly to our rise in compensation costs. The remaining increase in personnel compensation costs is attributable to an increase in workyears and pay raises in the last two years.

FY1982 Consultants

Senator Stevens: What are the estimated consulting services costs for Washington Headquarters Services in 1982?

Answer: Our FY1982 request for consulting services is $22,000.

FY1982 Standard Level User Charges

Senator Stevens: Standard level user charges have nearly doubled in the last two years. Please explain.

Answer: The General Services Administration provides us with estimated Standard Level User Charges for inclusion in our budget request. Their rates are averages calculated from commercial rental rate data grouped according to Standard Metropolitan Statistical Areas. Our space requirements have increased by 7% since FY1980. The rates charged by the General Services Administration for that space, however, have increased by 68%.

FY1982 "Other Costs"

Senator Stevens: A total of $16.4 million of "other" costs are expected in FY1982. Nearly 30% of the Washington Headquarters Services FY1982 Budget is considered "other". Moreover, this element of expense has increased by over 29% in the last two years. Please provide further justification.

Answer: Washington Headquarters Services provides automatic data processing support to the Office of the Secretary of Defense. These support services include ADP operations and support functions, ADP systems analysis and programming, and ADP support from the Air Force Data Services Center. ADP support represents 75%, or $12.1 million, of our "other" costs in FY1982. The remaining portion of "other" costs funds operations support to the U.S. Mission to NATO, training programs, graphics services, minor building alterations, and other miscellaneous services. In regard to the 29% increase in the last two years, our FY1981 request includes an inflation factor of 9% and our FY1982 request 9.4%. Combining these two rates yields an effective inflation factor for the two year period of 19.3%. The remaining 9.7% growth is directly attributable to increased requirements for ADP support. The Office of the Secretary of Defense is developing a distributed network of microprocessor terminals which is responsible for the 9.7% growth over the two year period. Former data processing applications are being expanded to include word processing and electronic mail capacity. Additional capabilities planned include the development of programs for graphic representation, display, and listing of information; development of a Database Management System which will reduce the reliance of users on software programmers; and expansion of the existing network.

American Forces Information Service

Senator Stevens: What factors have caused the large percentage increases in other purchased services, other supplies, and equipment?

Answer: Other-purchased-services costs rose as the result of duplication costs for Mini-TV. An escalating demand--from 333 Mini-TV sites in FY1980 to 413 sites in FY1982--and escalating handling costs have increased the American Forces Information Service (AFIS) budget requirement.

The increase in other supplies is principally a function of the growth in the Mini-TV program. Costs include videotapes shipping containers, and contracted duplication for the tapes. These are high dollar items ordered in volume to keep up with increased requirements.

Equipment requirements have risen as a result of the consolidation and planned FY1982 relocation of the American Forces Radio & Television Service-Programing Center.

American Forces Information Service

Senator Stevens: Communications costs for AFIS have doubled since FY1980. What initiatives account for this change?

Answer: The most significant communication cost increase is represented by a $4,500,000.00 supplemental budget approved in FY1981 expressly for the AFIS Satellite Network. All communication tariff rates for land lines have nearly tripled over planned costs. The Voice of America shortwave radio broadcasting transmission service requirement has increased by $200,000.00. The expanded live satellite news, special events, and sports event programs have further increased AFIS communications costs.

Student-Faculty Ratio

Senator Stevens: As a consequence of the planned increase of 72 students at USUHS in FY 1982, additional funding is required to support 34 additional faculty and staff. The civilian end strength at USUHS exceeds the number of students. Why are additional personnel required, and what is the student-faculty ratio?

Answer: Additional personnel are required to support the increased class sizes. Of the 34 positions requested, 18 will be faculty, primarily in the clinical sciences departments, 1 will be academic administration, and 15 will be teaching and research support. The student-faculty ratio for FY 80 was 3.06/1, for FY 81 it will be approximately 3.15/1 and for FY 82 the estimate is 3.14/1. The average student-faculty ratio for all U.S. medical schools is 1.35/1.

July 30, 1981

Staff Background Exhibit for SAC Data Report No. SA 257/81

The 1982 ratio of 3.14 students per faculty member compares favorably with the ratios of schools both in its geographical area and with other national schools. For example, consider the following:

School	Students/Faculty	Ratio
National Average Ratio	62,754/46,598	1.35/1
USUHS	591/188	3.14/1
Johns Hopkins	500/964	.51/1
Maryland	759/402	1.86/1
Georgetown	825/652	1.26/1
George Washington	610/488	1.25/1
Kentucky	439/277	1.59/1
South Alabama	268/134	2.00/1

Moreover, if one compares the number of USUHS students to the number of combined faculty and staff, the University has fewer faculty and staff per student than some of the above referenced schools. Note the following sampling:

School*	Students/Faculty + Staff	Ratio
USUHS	591/629 civ. + 113 mil.	1/1.25
George Washington	610/3488	1/5.56
Kentucky	439/907	1/2.08
South Alabama	268/425	1/1.59

* Personnel at Georgetown, Maryland, and Johns Hopkins were unable to provide information on total number of staff.

Mission Essential Travel

Senator Stevens: Please explain the requirement for "mission essential travel".

Answer: Mission essential travel is that for which the fundamental purpose cannot be achieved by alternative means, or cancelled without adversely affecting the performance and mission of the University. The categories of travel which are considered mission essential for the University are:

A. Board of Regents Travel

Public Law 92-426 established a Board of Regents to conduct the business of the University. Board members are located throughout the United States and travel funds are required for meetings. Meetings are conducted approximately every two months.

B. Student Travel

(1) Post-Freshman summer field training with troops in field operating units, med-evac squadrons, and the fleet. This travel is part of their training as military physicians.

(2) Junior and Senior students rotate through clinical clerkships in the various medical specialties. A part of the students will have clerkships in Family Practice and Medicine, at Service teaching hospitals outside of Washington when facilities in Washington cannot handle the whole class. Emergency and Operational Medicine clerkships will be at Brooke Army Medical Center, as there are no Washington operational medicine teaching opportunities. This travel is an integral part of the special military medical program.

C. Visiting Lecturer Travel

Visiting government military and civilian lecturers are brought in at no personnel cost to broaden the curriculum in various specialties. Without such lecturers, additional faculty would be required, or civilian specialists would have to be provided by contract.

D. Continuing Education

PL 92-426 requires the University to provide programs in continuing medical education. The programs involve travel costs only for University personnel to give short courses in medical specialties to military physicians in remote areas and overseas where current military department programs do not reach. Travel cost for these programs is far less costly than similar programs by contract which require personnel and overhead costs as well.

E. Pre-Freshman Orientation Faculty Travel

To insure uniformity of training and orientation for incoming students, regardless of branch of service, military faculty members visit the different training sites for each branch of the service. This allows for a continuity of later programs at USUHS.

F. Faculty Travel

(1) The faculty must attend medical scientific meetings. Without such it would be impossible for a faculty member to maintain up-to-date knowledge of the "state of the art" for their particular field of medicine.

(2) The faculty must publish papers and present these papers at medical conferences. Without this travel it would be difficult for the University to attract and maintain a high caliber faculty and to attract the adjunct faculty who serve without charge to the University.

G. Essential Support Travel

This is travel which, while not directly part of the University's educational mission, is essential if the University is to function. Some examples of this are: travel necessary to perform the financial, logistical, personnel, and purchasing operations of the University; travel necessary for attendance at selection boards held by each of the services; and travel necessary for academic department chairmen to attend chairmen's meetings.

Senator Stevens: Repair and maintenance efforts as well as minor construction projects are declining in the FY 1982 program. Does this represent actual requirements, budget constraints, or lower priority?

Answer: The $19 million requested for real property maintenance activities in FY 1982 reflects budget constraints. The backlog of maintenance and repair, assuming realization of FY 1982 appropriations, is an estimated $33,319,000.

Senator Stevens: ODE is the only area of the Department of Defense, if not the federal government, where utility costs are declining. What accounts for the fantastic reduction of $10.7 million for utilities?

Answer: The justification figures you are addressing reflect the January 1981 Presidential Budget Submission. They do not reflect either the FY 1981 request including the supplemental or the FY 1982 request as amended. The total adjustments for utilities were as follows:

($000)

	From	To
FY 1981	12,967	22,502
FY 1982	2,237	17,037

The amended FY 1982 budget still reflects a decrease of $5,465,000. This is because the FY 1981 supplemental request was not fully projected into FY 1982. As a result, costs are understated pending relief in the form of reprogramming or proposed FY 1982 supplemental appropriations. The actual costs are estimated to be $24,585,000 in FY 1982.

Senator Stevens: Miscellaneous logistics equipment planned for FY 1982 will drive costs from less than $1 million in FY 1981 to almost $4 million next year. Please explain.

Answer: $2.4 million is for purchase of kitchen and serving equipment as part of the two-year phased student meal program. The balance is for inflation and for replacement of installed school equipment and investment items costing between $1,000 and $3,000 per unit previously funded from the procurement appropriations.

Senator Stevens: What services provided by DLA require reimbursements. This appears to be the first year that ODE has had this arrangement with DLA. Simply, what does the "other administrative logistics costs reimbursement to DLA" provide for?

Answer: The Defense Logistics Agency (DLA), through the Defense Supply Centers, provide procurement support to the DoD Dependents Schools. The budget estimate of $922,000 is for reimbursement for salaries and benefits of DLA employees engaged in contracting and vendor payment for school material ordered.

Senator Stevens: The FY 1982 request for cost of living overseas allowances of over $24 million is a quantum increase over FY

1981. What new initiatives are proposed by this funding request? Has the ODE maintained allowances artificially low in prior years? Similarly, PCS costs are rapidly increasing. Please elaborate on those areas and provide a detailed cost estimate for the amendment request for $16 million.

Answer: Again, as indicated in the response to question two, the revised FY 1981 and FY 1982 estimates for overseas allowances are as follows:

($000)

	From	To
FY 1981	29,509	35,803
FY 1982	45,810	43,973

The projected increases is in the amount of $8,170,000 vice $14 million and reflects foreign inflation in rents and utilities, increased costs associated with 281 school level personnel to meet congressional mandated requirements, and a decline in the number of DoDDS personnel residing in government furnished housing as the housing is being utilized by Military Service personnel. The requested breakout for overseas allowances is as follows:

($000)

	From	To
Housing	27,674	33,977
Cost of Living	4,180	5,460
Post Differential	3,949	4,536
Total	35,803	43,973

Again, as previously indicated, the revised FY 1981 and FY 1982 estimates for PCS travel are as follows:

($000)

	From	To
FY 1981	14,879	14,742
FY 1982	26,013	25,232

The adjusted increase is in the amount of $10,490,000 and reflects inflation, higher cost of fuel to transport household goods, greater utilization of teachers hired from CONUS, and the hiring of additional special education personnel from CONUS to comply with congressionally mandated programs. Since submission of the DoDDS FY 1982 amended budget, DoDDS has experienced more recruitment of staff from CONUS resulting in an estimated expenditure of $17,746,000 for PCS in FY 1981. The increased number of one-year areas and a change in weight allowances for the Pacific have added $2,508,000 to the DoDDS FY 1982 request. Approximately 1,350 employees will change stations in FY 1982. Of this total over 1,200 are teachers. (The average cost for a change of station move in FY 1982 is estimated to be $13,400.) There is also a significant cost for the 2,800 employees who exercise their reemployment agreement travel every year with a trip back to the United States.

Senator Stevens: Special education costs will increase by over $9 million in FY 1982. Does this represent a change in the scope of special education programs?

Answer: Yes. Although the Department of Defense Dependents Schools system (DoDDS) has always provided special education programs at certain overseas locations, Title XIV, Dependents Education Act, 1978, made DoDDS subject to the provisions of PL 94-142. This statute requires the finding of handicapped children that are not being served or are underserved and the providing of special education at all school locations. Due to the need to move to rapid compliance with the requirements to fully implement the special education program, a total of 446 additional end strength are provided in FY 1982. Personnel and related costs are in the amount of $8,009,000. $450,000 is included to improve and modify preschool handicapped centers. $225,000 is for other alterations; other amounts are for inservice training ($300,000); supplies and equipment ($100,000).

Senator Stevens: Administrative costs associated with supplies/services and travel have more than doubled since FY 1980. Aside from inflation, are there any ODE unique practices which have accelerated requirements?

Answer: ODE initially budgets for the costs associated with implementation of the Five-Year curriculum review cycling requirements initiated by DoDDS in FY 1975. The implementation requires the purchase of materials included in pilot studies which have been directed by ODE and conducted in our schools. To accomplish this, the funds are reallocated to our regional office and upon obligation/expenditure are reported under education costs in lieu of administrative costs. Thus, the apparent increases in FY 1981 and FY 1982 over FY 1980.

The programmed amounts are as follows:

($000)

	FY 1981		FY 1982
Music	1,320	Media	4,000
Art	1,323	Foreign Language	500
Humanities	637	Career Ed.	700
Special Ed.	944		
Total	4,224		5,200

Increased travel costs are for travel by the professional staff and school professional employees in connection with inservice training of principals and teachers necessary to bring the program in compliance with Title XIV, Dependents Education Act, 1978, and PL 94-142.

QUESTIONS SUBMITTED BY SENATOR STENNIS

Senator Stennis: DLA appears to be one of the prime users of studies and analyses personnel outside the Defense Department. For FY 1982, a total of $3.9 million is requested for these activities. What type of studies and analyses are required that cannot be performed within resources of the Department?

Admiral Grinstead: The contractor study and analysis efforts are primarily those where we have need for specialized services of a temporary nature requiring skills either not available in-house or not suitable for temporary employment. Examples of some of these efforts are: actuarial modeling; force projection models; and development of personnel data bases.

Senator Stennis: Are you able to quantify savings that accrue to the Agency due to innovations resulting from past studies?

Admiral Grinstead: Yes sir. These savings-oriented type studies are in-house program management studies. Examples of certain of the savings are detailed in my formal statement.

Senator Stennis: Over half of the request for contractual studies and professional services is for the Defense Manpower Data Center. This is a small organization with only 44 personnel. Have you evaluated the possibility of increasing the workforce of this organization and reducing the outside assistance?

Admiral Grinstead: Yes sir. We have recently increased the staffing of the Defense Manpower Data Center and will continue to provide in-house resources for its recurring activity. There are, however, changing requirements of a temporary nature which can most economically be provided with contractor assistance. I assure you, we will limit the contractor effort to only that absolutely essential.

Senator Stennis: The FY 1981 Defense Appropriation Act provides for a test by DLA of paying a price differential on contracts not involving fuel for the purpose of relieving economic dislocations. This is an exception to the so-called Maybank Amendment which has been in effect for many years. Would you comment on the test parameters and how the test is working.

Admiral Grinstead: The test parameters agreed to by the Senate/House Conferees were: the total value of contracts awarded in the test; the price differential paid; the labor market areas of contract awards; the employment change caused by these contract awards; and the labor markets which would have been eligible for contract awards on a competitive basis and the employment situation in them. In addition, we are accumulating data on the price differential that might have been paid absent the five percent limitation.

In general, we believe the conduct of the test by our buying personnel has been professional and will provide meaningful data to Congress.

Senator Stennis: Your statement mentions that DLA manages one-half of the consumable items used by DoD. Who manages the other half? When you say that DLA fills two-thirds of DoD requisitions, is this the same as the "fill" rate? In other words, are you saying that 66 percent of the time that an item is requisitioned, it is available in stock? What happens in the other 33 percent of instances? Do you believe this rate is acceptable?

Admiral Grinstead: The number of National Stock Numbers (NSNs) managed include both consumable and nonconsumable items. DLA's primary mission is to manage consumable items. As of 30 Jun 81, Item Management assignments for all items was as follows:

	No. NSNs Managed	Percent
DLA	1,943,546	49%
Air Force	893,200	23%
Navy	650,482	16%
Army	286,907	7%
Marine Corps	23,875	1%
Other (i.e., National Security Agency, VA, U.S. Coast Guard, Defense Mapping Agency, Defense Nuclear Agency, General Services Administration)	152,654	4%
TOTAL	3,950,664	100%

During FY 80, DLA processed 28 million requisitions compared to the other Services' 11 million. This is not the same as fill rate which is determined by the percent of requisitions that are satisfied from assets on-hand. The DLA FY 81 fill rate through May 1981 was 91.2%.

Senator Stennis: DLA is requesting $13.1 million for modernization of Automatic Data Processing Equipment. This is an increase of $10.5 million over FY 1981. Why the large increase this year? Cannot the program for modernization be spread over several years?

Admiral Grinstead: We have spread it over several years. The FY 82 increase is for commercial conversion support and the initial ADPE installations planned for May, 1982.

Senator Stennis: When do you plan for the total Automated Data Processing Equipment Replacement Program (ADPER) to be completed?

Admiral Grinstead: We plan to complete it in FY 1986.

Senator Stennis: You are requesting $2.9 million for procurement of replacement ADP equipment and $2.6 million for telecommunications equipment. Both types of equipment were previously leased. What were the criteria which led to a decision to procure rather than to continue leasing?

Admiral Grinstead: The criteria were both economic and operational necessity. For example, we plan to exercise puchase options where they are cost effective. In addition, we plan to buy certain communications equipment which will replace currently leased obsolete equipment.

SATELLITE COMMUNICATIONS

Senator Stennis: There continues a controversy over additional satellite procurement for the Navy's Fleet Satellite Communications program (FLTSATCOM) or leasing of satellite communications capability through a program called LEASAT. What can you tell me about this?

General Hilsman: Communication satellites to support military forces are required to have worldwide coverage, capacity to support the needs of the operational forces, jam resistance sufficient to ensure that communications can be provided when needed and survivability and endurance against projected threats. Both the FLTSATCOM and the LEASATCOM systems are needed throughout the 80's to provide worldwide coverage and to ensure adequate capacity. The FLTSATCOM, with some jam resistance and nuclear hardening, is needed to provide continued support to our strategic forces. The LEASATCOM is needed to provide sufficient capacity to support our tactical forces such as the Rapid Deployment Joint Task Force (RDJTF). However, it should be recognized that the jam resistance of the FLTSATCOM is limited and the jam resistance of the LEASATCOM is non-existent and that it would therefore be very easy for the enemy to deny us communications over these satellites. For this reason, these satellites must be replaced as soon as possible with the new MILSTAR SYSTEM which, with its extremely high frequency, can provide sufficient jam resistance to overcome projected jamming threats. However, the first MILSTAR will not be launched until the 87-89 time frame and the FLTSATCOMs and the LEASATCOM must be counted on until the full MILSTAR constellation of four can be placed on orbit.

Senator Stennis: Is it your assessment that either program will provide for a continued viable fleet satellite communications capability for the Navy?

General Hilsman: For the reasons stated above, both systems are needed although both are vulnerable to an enemy jamming attack. Each FLTSATCOM satellite has 12 channels which are part of the AFSATCOM system to support the strategic forces. Each FLTSATCOM satellite also has 9 channels and each LEASATCOM satellite has 6 channels which support Navy operations and support other users such as the RDJTF. Since the strategic AFSATCOM channels are not on the LEASATCOM, this satellite cannot support the strategic forces. However, the FLTSATCOM cannot, by itself, provide sufficient capacity to support the Navy, RDJTF and other tactical users.

Senator Stennis: Please provide for the record a cost comparison between the requirements for LEASAT as opposed to FLTSATCOM.

General Hilsman: The projected cost for LEASATCOM is $335 million plus $18 million of Government-furnished equipment for service for five years with a four satellite constellation. The projected cost for three additional FLTSATCOMs is $557 million.

SATELLITE COMMUNICATIONS

Senator Stennis: I understand FLTSATCOM satellites one through five are currently on orbit. Even with the extended design life it appears an additional satellite will be required for launch no later than May 1985. What are your alternatives if the FLTSATCOM option is to be pursued? There is presently no request for funds in fiscal year 1982?

General Hilsman: The first four FLTSATCOMs are currently on orbit and are working well. FLTSATCOM five is scheduled to be launched in August of '81. We predict that the first of the three additional FLTSATCOMs will be needed in the 1985 time period. We need to buy long-lead items in the '82 budget with final procurement in the '83 or '84 budget. All other alternatives, based on later funding, would lead to a slip in the launch of FLTSATCOM six and a potential gap in the 85-86 time period.

CONTRACTUAL SERVICES

Senator Stennis: DCA is requesting $11.2 million for professional and management services by contract in FY 1982. What are the types of programs for which you must seek outside assistance?

General Hilsman: The resources to which you refer were budgeted to support mission requirements of the Command and Control Technical Center and the WWMCCS System Engineer. Examples of effort requiring outside assistance are:

1. Engineering design related to upgrade of the Command and Control (C^2) operational areas and associated support facilities of the National Military Command Center (NMCC) and the Alternate National Military Command Center (ANMCC).

2. Engineering design support for the National Emergency Airborne Command Post (NEACP) to enhance information handling capabilities and to ensure that the NEACP is compatible with planned and evolving C^3 capabilties.

3. Engineering design to develop and enhance the capability of the NMCS Communications Subsystem to disseminate Emergency Action Messages.

4. Engineering design to improve the capability of Warning Subsystems to provide accurate and timely Tactical Warning and Attack Assessment (TW/AA) to the National Command Authority.

5. Engineering design support related to improving capabilities to the National Military Command System (NMCS) Data Collection and Processing Subsystem to collect and disseminate data. This involves enhancing the Command Center Processing and Display System, developing NEACP specifications, and improving the Joint Reporting System.

6. Systems engineering and documentation to develop and maintain NMCS system description baselines which will provide a reference for performance evaluation, performance reviews, design improvement evaluation, configuration control, and training.

7. Technical support in the form of test design, data collection, and data analysis support to JCS exercises such as NIFTY NUGGET, POTENT PUNCH, etc., and support for Functional Process Tests to evaluate end-to-end performance of such subsystems as TW/AA.

8. Technical guidance and integrated support, and engineering studies and analyses to monitor implementation of selected WWMCCS capabilities and to develop interface requirements, system project plans, and system performance specifications.

CONTRACT STUDIES AND ANALYSES

Senator Stennis: The fiscal year 1982 request for contract studies and analyses is 50% higher than fiscal year 1981. Why the large increase in a single year?

General Hilsman: This O&M increase is generated by the need for more detailed cost vs benefit studies for proposed Federal (Telecommunications) Standards developed by the National Communications System (NCS). These standards are required to increase the ability of functionally similar Federal telecommunications and information systems to function together as a survivable and endurable national telecommunication resource in times of national emergency. They are in direct support of the objectives of Presidential Directive NSC/PD-53 and the basic assigned mission of the NCS organization.

Senator Stennis: How do you determine which of the studies and analyses are cost-effective if performed by contract?

General Hilsman: In DCA a senior management review function is performed on each proposed study and analysis or management support contract by the Acquisition Review Committee (ARC). The ARC is chaired by the Vice Director, DCA. A specific responsibility of the ARC is to ensure that proposed acquisitions are justified on the basis of cost and benefits. Upon completion of each such acquisition the contracting officer's representative or project monitor is responsible for evaluation of the product delivered. If a study would achieve quality goals within cost limitations it would be considered cost-effective.

COSTS AND BENEFITS OF SOFTWARE STANDARDIZATION

Senator Stennis. Your request includes $3.5 million for standardization of scientific computer software programs which support production. This is to promote increased efficiency. What were the amounts obligated for this purpose in fiscal years 1980 and 1981, and what payoff or benefit will be realized from the standardization program?

General Aldridge. More and more our resources are being devoted to the production of digital data rather than standard paper graphics. Consequently, over the last few years it has been necessary to upgrade our large mainframe scientific and technical computers several times to meet the increased military requirements for products using digital data. However, the necessary upgrading of related software programs has not kept pace with the improved hardware and we need to rectify this situation. Similarly, we need to enhance our data processing capabilities by accelerating our efforts to translate existing software programs from the original FORTRAN language to the standard FORTRAN 77 language specified by the National Bureau of Standards and adopted by the Department of Defense.

In fiscal year 1980, we obligated $3.1 million and in fiscal year 1981, we plan to obligate $3.2 million for the development of automatic data processing software and related support. These funding levels permit us to exploit new or refined applications in a wide range of production processes and to take advantage of state-of-the-art techniques. The increase of $3.5 million for fiscal year 1982 is essentially a one-time surge in this effort, especially with respect to high-use software programs. We expect this acceleration to reduce future needs for more large mainframe computers or for those with a greater capacity and our long range plans have been developed on this assumption.

Another example of the benefits to be derived from the standardization program, which also includes optimization, is illustrated by the following recent experience: we had the computer hardware and software specialists at the Federal Simulation Center optimize the program for our digital Terrain File Management System which is used approximately 3,000 times a month to batch-process data through our computers. As a result of this optimization, we were able to reduce the processing time by about 80 percent. We expect the increased funding in fiscal year 1982 to permit us to optimize other high-use software programs with similar but probably less dramatic results.

NAVSTAR GLOBAL POSITIONING SYSTEM

Senator Stennis. The House Armed Services Committee has recommended termination of the NAVSTAR Global Positioning System. What effect would termination of the program have on your planned operations for the future?

General Aldridge. The Global Positioning System, or GPS, will be used to position about 95 percent of the source material that DMA uses. It would be impossible for DMA to meet the accuracy requirements of weapon systems without the GPS.

SUPPORT OF THE MX MISSILE SYSTEM

Senator Stennis. DMA is requesting substantial sums for geodetic and geophysical support for the MX missile system. How much has been appropriated to date for this system, and what is projected to be required for the system?

General Aldridge. The fiscal year 1981 supplemental appropriated $1.2 million to DMA for geodetic and geophysical support of the MX. The amount is divided evenly between the O&M and RDT&E appropriations. The fiscal year 1982 budget requests $1.5 million in the O&M appropriation and $4.5 million for RDT&E.

For the longer range planning period of fiscal year 1983 through fiscal year 1987, DMA projects a requirement for $33.4 million in O&M, $15.2 million in RDT&E, and $10.4 million in Procurement.

In fiscal years 1981 and 1982, the O&M funds are being used solely for gravity surveys in the MX test range area. For the planning years, the funds are required for surveys of operational sites.

All of the RDT&E funds will be used for development of new survey equipment to insure meeting the geodetic and geophysical portion of the missile's accuracy requirements and to preclude a substantial increase in the number of surveyors that would be needed to perform the surveys using existing equipment and techniques.

Procurement funds are needed to purchase survey equipment, most of which will be available as a result of the earlier investments in research and development.

EXTENDED WORKWEEK AND EXTRA SHIFTS

Senator Stennis. Your statement mentions that much of the work force is on a three-shift, six-to-seven-day work week to meet near term military requirements. Is this a recent problem, or has it existed for a number of years? Doesn't productivity fall pursuant to the overtime requirements? Are there other options available to satisfy the workload requirements?

General Aldridge. The shift work mentioned in my statement refers basically to those mapping, charting, and geodesy production operations involving our photogrammetric equipment and computer facilities. The extra shifts and extended work week began in fiscal year 1979 and were necessitated by the great demands placed on these activities to support requirements of the air, sea, and ground launched cruise missiles. These systems required large volumes of Digital Terrain Elevation Data and Terrain Contour Matching, or TERCOM, matrices which far exceeded DMA's available photogrammetric capability.

All existing equipment was placed on three shifts and procurement was initiated for additional equipment that would enable DMA to meet the known, minimum essential requirements in support of the nuclear cruise missiles while operating on a two-shift basis. With increased equipment, the third shift could be reserved for a surge capability. This is highly sophisticated photogrammetric equipment which has a three-year procurement lead time. It is now being delivered and our plan has been to draw down to a two-shift operation during fiscal year 1983.

However, the newly developed plans for deployment of conventional cruise missiles places the Agency in a situation similar to that previously existing for the nuclear version. More specifically, all available photogrammetric resources are now dedicated to satisfying requirements of the nuclear cruise missiles and DMA will be required to remain in a three-shift operating mode until our photogrammetric capability can be expanded again. Resources for this expansion have been included in our five-year program funding request submitted to the Secretary of Defense in calendar year 1981.

Although our people are routinely required to work only eight-hour shifts, working this six to seven days per week over extended periods does have a negative affect on productivity as you point out. It is not a desirable situation and we have initiated actions necessary for a long-term solution by requesting additional people, equipment, and construction of production space.

UNDERGROUND NUCLEAR TEST

Senator Stennis: Your RDT&E request for Underground Nuclear Tests has increased substantially over prior years. Why is this?

General Griffith: In the early 1970's, DNA conducted approximately two underground nuclear tests per year to investigate the X-ray vulnerability of new strategic reentry systems. Because of overall DNA budget constraints, other funding priorities such as support of MX basing vulnerabilities, the DNA theater program and the strong commitment of the previous administration toward a comprehensive test ban (CTB), the frequency of underground testing was reduced to about one every two years in the late 1970's. This level of testing is inadequate to meet urgent systems requirements such as MX missile, advanced ballistic reentry vehicle (ABRV) and satellite hardness validation. In addition, this level is inadequate to resolve key uncertainties in basic nuclear weapons effects such as source region electromagnetic pulse effects on missiles during flyout and the cratering and crater related ground shock from surface bursts of nuclear weapons.

Finally, it should be noted that at this level of testing the technical expertise for conducting underground nuclear events was beginning to erode seriously.

To redress these differences DNA in coordination with the services developed the DoD Augmented Nuclear Test Program (ATP). This program was included in the joint DoD/DoE Augmented Program description which was reviewed and approved by the President in the fall of 1980. The projected level of testing will restore the capability which existed in the early 1970's and will provide the necessary data to meet urgent system requirements.

FACILITIES UPGRADE PROGRAM

Senator Stennis: What is the nature of the facilities upgrade program for the Nevada Test Site? What is the total cost of this program, and when is it proposed to be completed?

General Griffith: In order to provide the maximum rate of underground testing to meet military requirements over the last decade within DNA budget limitations, the DNA facilities at the Nevada Test Site have been allowed to deteriorate to the point where today we are limited in the magnitude, character and frequency of experiments which can be conducted.

For example, instrumentation cable plants with a design lifetime of five years are now nearly fifteen years old. Less than half of the cables meet the required specifications. Over 75% of the instrumentation inventory is more than ten years old. We are particularly limited in high frequency recording and multiplex data transmission. Present mining capability is inadequate to support the level of testing projected for 1983 and beyond. The main power distribution system is inadequate to meet current and projected requirements.

To restore this capability, a facilities upgrade program is planned which will begin in Fiscal Year 1982 and will be substantially complete by the end of Fiscal Year 1983. The total cost of this upgrade will be $29.8 million of which $6.3 million will be spent in Fiscal Year 1982.

DEFENSE NUCLEAR SURETY INSPECTION

Senator Stennis: Your statement mentions the need to accomplish an annual Defense Nuclear Surety Inspection on 20-25 percent of all Service nuclear-capable units. Is this the level you have been accomplishing in past years?

General Griffith: Yes. Defense Nuclear Agency's (DNA) charter was published 3 November 1971. Because a joint nuclear weapons technical inspection manual had not been published and a standardized Department of Defense (DoD) inspection system had not been implemented, the annual sample size of 20-25 percent was recommended by the Joint Chiefs of Staff. In 1976, TP 25-1, the first joint technical inspection manual was incorporated. DNA continues to inspect Service certified nuclear-capable units as directed by the Secretary of Defense within the Joint Chiefs of Staff specified sample size of 20-25 percent.

ENEWETAK BASE CAMP

Senator Stennis: No funds have been requested in recent years for support of the Enewetak Base Camp. Is this now closed?

General Griffith: The Enewetak Base Camp was closed after completion of the Enewetak Radiological Cleanup Project in April 1980.

TRAINING EXERCISE

Senator Stennis: When is the next training exercise scheduled to simulate nuclear weapon accidents? Is this a semi-annual exercise?

General Griffith: The next training exercise, a command post exercise (CPX) to test command, control and communications procedures, will be held in 1982. Following NUWAX-81, a field training exercise (FTX) involving actual response forces as well as command elements, the Assistant to the Secretary of Defense (Atomic Energy) designated the Defense Nuclear Agency (DNA) as the DoD lead agency for funding and conducting biennial FTX's in the odd-numbered years through 1989. In addition, DNA was directed to coordinate with the Joint Chiefs of Staff in developing annual CPX's through 1990. Thus, 13 exercises are planned for the next nine years. The primary response to the simulated accidents will rotate among the Army, Navy, Air Force and the Department of Energy.

COMMUNICATIONS, COMMAND, CONTROL AND INTELLIGENCE (C^3I)

Senator Stennis: Your statement mentions the work being conducted to enhance the survivability and reliability of communications, command, control and intelligence (C^3I) systems. Critics of the Extremely Low Frequency (ELF) program, which was formerly called SANGUINE, claim the system is not survivable in a wartime scenario. Would you comment on this and tell us if DNA is working to improve this system's survivability?

General Griffith: In the nuclear environment ELF appears to provide two clear advantages over other communications for the fleet ballistic missile element of the strategic triad. First, as you know, it penetrates sea water substantially better than any other system and thus permits the submarines to operate at significantly greater depths than is possible with the current Very Low Frequency (VLF) system thus enhancing their survivability. Second, ELF provides a signal which propagates through the atmosphere to greater distances than VLF and is less susceptible to ionospheric disturbances. Thus ELF will provide more reliable communications to submarines from a propagation standpoint.

There are thus two aspects to your question of survivability of an ELF system: First, propagation effects through an atmosphere which is substantially disturbed by nuclear detonations and second, the physical survivability of the transmitter(s) and their associated antenna systems.

DNA has developed a capability to predict propagation effects on ELF systems. This capability, developed in close coordination with the Navy, results from a fifteen year program which has relied on theory confirmed by ELF measurements in the natural environment. We have no nuclear data on ELF propagation from past tests; nevertheless, we have high confidence in our propagation prediction capability which is the basis of my statement that ELF provides more reliable communications than other systems.

We have not worked with the Navy on the physical survivability of ELF systems. Recently the Department of Defense and the Services have emphasized the development of systems which can be reconstituted after an attack. The Navy is working on concepts for a rapidly deployable reconstitutable ELF system.

Industrial Security Workload

Senator Stennis: Your statement mentions the slip in scheduled inspections pursuant to the Defense Industrial Security Program. Would you compare the level of inspections when this program was under the Defense Logistics Agency with the level being accomplished in FY 1981 and the proposed FY 1982 level?

Mr. Sproul: The number of inspections conducted under the Defense Logistics Agency (DLA) were 20,933 in FY 1978, 20,460 in FY 1979, and 20,403 in FY 1980. The number of these inspections required under DIS is 21,300 in FY 1981 and 22,000 in FY 1982. Under DIS, emphasis has been placed on quality, not quantity; therefore, the number of inspections accomplished with a constant personnel complement is resulting in fewer inspections accomplished and more slipped. This is evidenced by the slippage rate: 646 in FY 1978; 791 in FY 1979; 878 in FY 1980; and 2900 in FY 1981. That figure should decrease to 500 in FY 1982 as the impact of the additional FY 1981 resources is felt. Hiring lags and training of the additional personnel precluded greater productivity in FY 1981. Hence, the number of quality inspections accomplished in FY 1982 is projected to rise to 21,450 and the number of slips decrease to 500. FY 1983 should even bring greater productivity and a full quality effort with inspections projected at 22,100 and only 200 slipped.

Personnel Security Increased Investigative Workload

Senator Stennis: The workload for the Defense Investigative Service continues to increase tremendously. Yet the civilian and military work force in the Department of Defense is relatively static in total numbers. Where do the large increases come from?

Mr. Sproul: The large increase in DIS workload stems from additional requirements to grant higher level clearances to not only military and civilian personnel, but also industrial employees performing on DoD classified contracts. These higher clearances require Special Background Investigations (SBIs), and Standard Background Investigations (BIs) which call for much more investigative effort than the National Agency Checks required for lower level clearances. In the industrial sector, there has been a steady growth in DoD contracts for sophisticated technology and weaponry which requires more sensitive and higher levels of clearance. For example, during the period FY 1976 to FY 1980, requirements for industrial security clearances necessitated an increase from 8,600 investigations to 25,000. Military and DoD civilian personnel, despite relatively little change in total numbers, also have required additional and more sensitive clearances because of the increasing sophistication of battle field technology as well as a greater need for access to sensitive intelligence information.

Comparison of Case Completion Time

Senator Stennis: How does the projected case completion time over 100 days compare with the experience of the Office of Personnel Management that performs personnel investigations for departments and agencies other than DoD?

Mr. Sproul: During the month of May 1981, the Office of Personnel Management reported an average case completion time of 70 days. During the same month the DIS case completion time was 152 days.

Law Enforcement Mission

Senator Stennis: Is it your opinion that the transfer of the law enforcement mission to the Defense Audit Service will help to alleviate the current backlogs in personel investigations?

Mr. Sproul: No Sir, it will not. A total of 100 spaces are being transferred with the mission.

Additional Prepared Statements

Senator STEVENS. Statements of the following persons will be inserted in the record at this point: James H. Curry, Acting Director, Defense Audit Service; C. O. Starrett, Deputy Director, Defense Contract Audit Agency; Bernard J. O'Donnell, Director, Defense Investigative Service; Lieutenant General Gerald J. Post, USAF, Director, Defense Logistics Agency; Major General William L. Nicholson III, USAF, Director, Defense Mapping Agency; Lieutenant General Harry A. Griffith, USA, Director, Defense Nuclear Agency; Theodore D. Wood, Director of the Office of Civilian Health and Medical Program of the Uniformed Services (CHAMPUS); Donald B. Shycoff, Director for Operations, Office of the Assistant Secretary of Defense (Comptroller), on the "Claims, Defense" account; David O. Cooke, Deputy Assistant Secretary of Defense (Administration), representing the requirements of the Office of the Secretary of Defense, the Washington Headquarters Services, the Organization of the Joint Chiefs of Staff, the American Forces Information Service, the Medical Information Systems, the Department of Defense Dependents Schools program, the Office of Economic Adjustment, and the Defense Audiovisual Agency; statement for the record, "Retired Pay, Defense"; statement for the record, "Special Foreign Currency"; Dr. Jay P. Sanford, Dean, School of Medicine, Uniformed Services University of the Health Sciences; and Hon. Robinson O. Everett, Chief Judge, U.S. Court of Military Appeals.

[The statements follow:]

PREPARED STATEMENT OF JAMES H. CURRY

ACTING DIRECTOR

DEFENSE AUDIT SERVICE

Mr. Chairman and Members of the Committee,

I am pleased to present the budget requirements of the Defense Audit Service. The Defense Audit Service was formed in October 1976 to strengthen the Department of Defense interservice and internal audit programs. The Defense Audit Service plans and conducts:

1. Internal audits of the Office of the Secretary of Defense, the Organization of the Joint Chiefs of Staff, the Unified/Specified Commands, and the Defense agencies;

2. Interservice audits in all Department of Defense components;

3. "Quick response" audits on matters of special interest to the Secretary of Defense, including audits designed to disclose fraud, waste and abuse in Defense programs;

4. Audits of the Security Assistance Program for all levels of management; and

5. Other audits as required.

The FY 1982 budget request for the Defense Audit Service of $17,859,000 represents an increase of $639,000 over our current year revised estimate. Included in this amount is $208,000 to provide for the anticipated cost of inflation. The net increase of $431,000 will provide for additional auditors' salaries and related travel and other costs.

For your convenience, a summary of the financial requirements and personnel strengths for the Defense Audit Service for fiscal years 1980, 1981, and 1982 is presented below.

SUMMARY OF FINANCIAL AND PERSONNEL REQUIREMENTS
(In Thousands of Dollars)

Element of Expense	FY 1980 Actual	FY 1981 Budget	FY 1982 Estimate
Civilian Personnel Costs	$11,930	$13,401	$13,832
Transportation of Personnel	1,839	2,438	2,525
Transportation of Things	53	58	63
Utilities and Rents	584	660	718
Printing & Reproduction	1	1	1
Purchased Services	479	554	602
Supplies and Materials	71	78	85
Equipment	9	30	33
	$14,966	$17,220	$17,859
Personnel Requirements			
Year-End Strength	379	403	409
Work Years	369	391	393

PREPARED STATEMENT OF C. O. STARRETT

DEPUTY DIRECTOR

DEFENSE CONTRACT AUDIT AGENCY

Mr. Chairman and Members of the Committee:

I am pleased to appear before you to support the budget request of the Defense Contract Audit Agency (DCAA) for fiscal year 1982. First, a few words to summarize the mission of DCAA.

AGENCY MISSION

Our mission is to assist the Department of Defense (DoD) in achieving sound contract pricing by (1) evaluating the reasonableness and allowability of cost and pricing data submitted for proposed contracts, (2) verifying the propriety and acceptability of costs charged or allocated to flexibly priced Government contracts, and (3) deterring contractors' inefficient practices which, if not detected and corrected, lead to excessive costs and contract prices.

Inherent in the mission that I just described is our audit responsibility to report suspected fraud or waste that may exist in Federal expenditures identified thru our reviews. In this aspect of our work, we refer instances or patterns of suspected irregularities disclosed during our audits to the proper investigative agencies. In order to resolve any suspected contractor irregularities, we provide audit support to the investigative agency when requested.

We expect to devote more time to assure that contractor internal control systems subject to our review are able to preclude or detect irregularities that may result from either poor system design, inefficient application or intentional manipulation. It is important to do this because the contractor's internal control systems are the foundation for the financial representations subject to our review. While it is the contractor's responsibility to install and maintain adequate controls, we are responsible for determining that such controls adequately protect the interests of the Government in administering its contracts and programs. We must always be on the alert for fraud in an environment where the automation of data systems requires more sophistication than ever in identifying irregularities. While presenting a strong challenge to the professional standards we have established, we will continue to maintain our long standing commitment to reporting on fraud whenever we see it, and recommending preventive measures to strengthen contractor internal control systems whenever it's required.

To further clarify our Agency's mission, let me explain how our workload is structured.

The workload of DCAA is divided into the following five functional categories:

1. Preaward Reviews

These are audits performed before the contract is awarded. Primarily included in this category is the time spent in reviewing contract price proposals, and cost accounting standards (CAS) disclosure and impact statements required under Public Law 91-379, an amendment to the Defense Production Act of 1950.

2. Postaward Reviews

These reviews are performed after the contract is awarded. The major portion of the work is for reviewing costs incurred under flexibly priced contracts. Other requirements are: reviews of contractors' compliance with their disclosed cost accounting practices; review of termination and other adjustment claims submitted by contractors; and reviews required under Public Law 87-653, the Truth in Negotiations Act.

3. Other Direct Effort

This category includes all other effort associated with the audits requested by the procurement community in the negotiation, administration, and settlement of contract prices. Items include procurement liaison, interface with the General Accounting Office, special project and studies, and other miscellaneous direct audit effort.

4. Technical Field Support

This includes the support personnel in the six regional offices and the Defense Contract Audit Institute in Memphis, Tennessee. The regional offices provide technical supervision and logistical support in the form of personnel services, payroll, budgeting and accounting, and travel services to field audit office personnel. The Defense Contract Audit Institute provides training for DCAA's audit staff; conducts research and distributes information to the field on operations audits, advanced techniques, and other audit topics which have Agencywide application.

5. Headquarters

In addition to the operational function of supervision, direction and guidance to the field, the Headquarters performs other work normally associated with the central office of a professional agency, that is, it establishes policy, provides legal counsel, resources management, and evaluates field office operations.

About 80 percent of our audit effort is expended in the Preaward and Postaward categories. The other functional areas remain relatively stable each year.

All of the services that I just described are also provided to about 35 other Federal agencies at those contractors where DoD has continuing audit interest, or where it is economical from a Government-wide point of view. The principal non-DoD agencies for which we perform these audit services are: the National Aeronautics and Space Administration, the Department of

Energy, and the Department of Transportation. Audits are also performed for the military departments in connection with the Foreign Military Sales (FMS) Program. The audits for non-DoD agencies and those under the FMS program are done on a reimbursable basis. We estimate our reimbursable earnings will be about $23 million for fiscal years 1981 and 1982, which is roughly 19 percent of our annual operating requirements.

FISCAL YEAR 1982 BUDGET SUMMARY

Our fiscal year 1982 budget request of $101.1 million is $1.3 million higher than our FY 1981 funding level. This increase is caused by program changes and inflation, offset by other minor decreases in fiscal year 1982.

Program changes accounted for $1,744,000 of the net increase comprised as follows: (1) $825,000 for the cost of merit pay and normal within-grade salary increases; (2) $844,000 for 51 additional workyears required for an increased level of price proposal reviews expected during FY 1982 and (3) $75,000 for additional travel required to accomplish the above work. These programs are offset by decreases in terminal leave ($-140,000); overtime ($-500,000) and permanent change of duty stations ($-50,000).

Anticipated inflation of our payments for rent, utilities and communication costs, accounts for $225,000 of the net increases between fiscal years 1981 and 1982.

At this time we are also requesting $310,000 under the Procurement Defense Agencies appropriation for fiscal year 1982. These funds are needed to: (1) replace work or obsolete equipment that meets the replacement standards established by the General Services Administration; and (2) acquire new equipment for which economic analysis indicates a reduction in operating costs will occur.

WORKLOAD TRENDS

The number of people required to perform our mission is primarily influenced by: (1) the volume of requests from procurement officials for financial advice and assistance in achieving reasonable contract prices for major weapons systems and other supplies and services, and (2) the number and dollar volume of auditable contracts. These two factors are directly influenced by the amount of DoD procurement and research and development funds appropriated by Congress each year. The increased amount appropriated for fiscal year 1981 coupled with the real growth in the defense budget for this current fiscal year will substantially increase our workload in 1982.

Over the past several years, increases that were caused by rising DoD Procurement and RDT&E expenditures have resulted in an increasing audit backlog in our incurred cost workload (Postaward Review Mission Category) because of prior staffing constraints. With the advent of real growth in the procurement of DoD material and services, the need for our audit resources will be considerably increased.

Some of these audit resources will be made available through further gains in our productivity. We expect these additional productivity gains to come about through the greater use of advanced audit techniques, investment in training programs designed to increase efficiency, increased audit awareness and involvement at all levels of management, and further research studies to optimize audit efficiency and effectiveness without impairing the professional quality of our audits. However, the extremely modest increase in funds included in this budget request ($844,000) will only partially alleviate the problem of applying audit resources to the expanding workload.

EMPLOYMENT TRENDS

During the past year we have seen our workforce significantly reduced as a result of hiring limitations. Considering the scope and complexity of our mission, we have operated, and continue to operate with, a very lean staff. Our authorized end-strength in fiscal year 1981 is 3,470; however, our actual strength so far this year has been considerably less. Our fiscal year 1982 request totals 3,485. While the number of employees we are authorized are at a low level when considering the recent trend in the DoD budget, we will continue to strive to maximize our efficiency and effectiveness while minimizing the expenditure of audit hours consistent with the necessity of protecting the Government's interest.

NET SAVINGS

For fiscal year 1980 it cost $109 million to do our work (including reimbursement earnings of approximately $20 million), and we achieved $2.9 billion of net savings to the Government through lower procurement costs. The return on a 3-year moving average shows a savings of about $30 for each dollar invested in DCAA.

CONCLUSION

This concludes my statement. I will be pleased to answer any questions that you and members of your committee may have.

PREPARED STATEMENT OF BERNARD J. O'DONNELL

DIRECTOR

DEFENSE INVESTIGATIVE SERVICE

Mr. Chairman and members of the committee, I am Bernard J. O'Donnell, Director of the Defense Investigative Service (DIS). It is a pleasure for me to appear before you to discuss our budget request for fiscal year 1982. Before getting into the specifics of that request I would like to inform you of an important addition to our mission.

Defense Industrial Security Program

Effective 1 October 1980, the Defense Industrial Security Program (DISP) was transferred to us from the Defense Logistics Agency. This is a sizeable addition to our mission since it represents 25 percent of the resources in our budget request. The primary objective of the transfer was to improve the administration of the program by increasing the quality and effectiveness of industrial security inspections and surveys. Thus far in fiscal year 1981 we have effected an orderly transition and are conducting quality efforts. We are however, experiencing an unacceptable increase in the backlog of slipped inspections. It is estimated that in fiscal year 1982 slips will decrease to an acceptable level and continued emphasis will be placed on quality and increased effectiveness.

Operation and Maintenance Budget Request

The $68.3 million budgeted in the fiscal year 1981 column of our Operation and Maintenance request is $25.4 million greater than the $42.9 million appropriated to DIS. The increase includes 1) $4.3 million for the civilian pay raise supplemental 2) $17.8 million for the DISP transfer, and 3) $3.4 million for 313 additional spaces (225 for personnel security investigations and 88 for industrial security inspections). Funds for the additional spaces were transferred from other Department of Defense (DoD) programs. The urgent need for these spaces is based upon a tremendous increase in our workload which will be addressed below.

The fiscal year 1982 Operation and Maintenance budget request of $76.2 million is $7.9 million greater than the $68.3 million budgeted for fiscal year 1981. This increase includes 1) $1.2 million for built-in items (such as inflation, annualization of the FY 1981 civilian pay raise and the Federal Employees Compensation Fund, 2) $6.4 million for annualization of the costs of the spaces added in fiscal year 1981 and 3) $.3 million for the civilianization of 65 military spaces in fiscal year 1982.

Personnel Security Investigations Workload

The Defense Investigative Service (DIS) performs the investigative phase of the DoD Personnel Security Program. The adjudicative phase is conducted by the requesters of investigations. The Defense Industrial Security Office (DISCO) requests and adjudicates investigations on DoD contractor employees. DISCO is a functional element of the DISP which was transferred to DIS on 1 October 1980. Under the DoD Personnel Security Program, an individual must be investigated and a security clearance awarded before he or she can perform work in a secure environment. The longer the investigation takes, the greater the loss in productivity of the individual being investigated. Ultimately such delays cost the government money. In the industrial environment, for example, the importance of time starts before an actual bid on a contract is ever made. Persons bidding on a project or program must be cleared before they can have access to the classified information pertinent to the project or program on which they are bidding. Once a contract is awarded, the work force must be cleared before the work can be started and turnover in the work force requires the clearance of replacement personnel. The same applies, to a lesser degree, to civilian employees of the government and military personnel. The important point to keep in mind is that the longer it takes to complete investigations, the more time is lost on important work and the more the ultimate cost to the government. Case completion times in excess of 75 days are considered unacceptable.

Average case completion times in our original budget request were estimated to increase from 93 days in fiscal year 1980 to 135 days in fiscal year 1981 and to decrease slightly to 124 days in fiscal year 1982. The request for fiscal year 1981 was based upon a fiscal year 1980 backlog of 64,600 cases and an estimated 176,600 requests for new investigations. The request for fiscal year 1982 was based upon a fiscal year 1981 backlog of 68,500 cases and an estimated 171,600 requests for new investigations.

However, since our budget request was submitted the situation has worsened. Even assuming our total budget request is granted for fiscal year 1981, we now estimate 178,500 cases will be opened, 88,000 cases will be backlogged at the end of the year and the average case completion time will increase to 148 days. For fiscal year 1982 we now estimate 178,500 cases will be opened, 72,600 cases will be backlogged at the end of the year and the average case completion time will increase to 166 days, or more than double the time considered acceptable. This is by far the largest workload in the history of DIS.

Industrial Security Workload

Our industrial security workload estimates have also changed since the budget was submitted. It is now estimated that slippage in scheduled industrial security inspection surveys will be 2,900 at the end of FY 1981. This increase in slippages over the estimated 1,000 in the President's Budget is due to efforts to improve the quality of inspections and the personnel turmoil related to the functional transfers. The improvement in the quality of the inspections effort was one of the major objectives of the functional transfer. Industrial security end strengths reflected in the FY 1982 President's Budget, to include the full year's impact of the 88 civilian spaces, should result in a continuation of an improved quality effort with 500 slipped inspections carried over to FY 1983. The improved quality effort in conducting inspections and surveys and greater assistance provided contractors in implementing industrial security programs should help alleviate our concern that the number of unsatisfactory and deficient conditions existing in industry have been increasing over the last few years.

Law Enforcement Mission

Although the budget request does not include any increase for our law enforcement mission, I would like to digress for a moment to inform you of recent accomplishments and the impending transfer of the mission to the Defense Audit Service (DAS).

As you recall DIS is assigned criminal investigative responsibility for the Defense Agencies and the Office of the Secretary of Defense. We currently have 191 criminal investigations pending, which includes 168 fraud cases and 11 fraud prevention surveys. Forty-eight investigations are before a grand jury and an additional 14 are under prosecutive consideration by United States Attorneys. In addition to the above effort, DIS also operates the DoD Hotline, which has resulted in a significant number of investigations. A substantial number of fraud investigations conducted by DIS has utilized the team approach. This concept developed jointly with the Defense Logistics Agency and the Defense Contract Audit Agency has been used successfully in more than 45 recent investigations, which involved multi-million dollar contracts in most cases. A recent example of the successful application of the team concept was a two and a half year investigation of a defense contractor involved in substantial cost mischarging. A fine of $706 thousand was levied against the company and fines of $20 thousand each and six months suspended sentences against two senior vice presidents for their role in the mischarging.

We have just been informed that the DIS law enforcement mission is being transferred to the Defense Audit Service which will report to a new Assistant to the Secretary of Defense (Review and Oversight). This new official will serve as the principal staff advisor to the Secretary of

Defense for matters related to the combatting of fraud, waste and abuse in DoD programs and operations.

Civilianization Program

Seventy military billets were converted to civilian positions during fiscal year 1981 and 65 additional military billets are scheduled for conversion to civilian in fiscal year 1982. From fiscal year 1976 through fiscal year 1979, we civilianized all but 200 of our original 1,750 military billets. This civilianization program was accomplished at the direction of Congress. During the course of that conversion program, I studied the effectiveness of our civilian work force in order to determine whether further civilianization was in the best interest of the service. I have concluded that, in accord with the intent of Congress, all military billets in DIS should be converted to civilian positions. Accordingly, in addition to the civilianization provided for in this budget, the 80 military billets remaining in DIS in fiscal year 1982 are scheduled to be converted to civilian positions during fiscal year 1983. These 80 military billets include 15 authorizations transferred to DIS in October 1980 with the transfer of the Defense Industrial Security Program from the Defense Logistics Agency. By the end of fiscal year 1983, this agency will have been completely civilianized.

Procurement Budget Request

The fiscal year 1982 procurement request is for $1.747 million. It includes $1.592 million for 261 motor vehicles, including 254 compact and sub-compact sedans, 5 half-ton pick-up trucks and 2 vans. The pick-up trucks and vans will be used for courier service and logistic support at the regional field offices and the Personnel Investigations Center (PIC). One hundred and twenty-one of the 261 vehicles requested will be used to replace a portion of our present inventory of vehicles meeting the DoD replacement criteria for age and mileage. One hundred and forty sedans will be used to provide vehicles for the 150 new agents required to meet an increasing workload and minimize case completion times. In most locations economics and efficiency require DIS agents to use motor vehicles to conduct investigative leads. Without an increase in vehicles to transport the new agents, the workload and our completion time goals could not be achieved.

In the category of "other capital equipment," $155 thousand is requested to procure an emergency generator and 32 Data Encription Devices and Microfiche File Unit. The emergency generator will be used to replace an old generator located at the PIC which has broken down repeatedly and its repair has been found to be not economically feasible. The Data Encription Devices will be used to prevent inadvertent disclosure of Defense Central Index of Investigations (DCII) data, or deliberate subversion of the system by unauthorized personnel after duty hours. These disclosures would be detrimental to the interests of the individual whose data are disclosed and would cause unnecessary operational difficulties for DIS as well as other DoD components using the DCII. Sensitivity of the DCII data base requires measures to protect it because its contents are subject to the provisions of the Privacy Act of 1974.

Before closing let me emphasize the importance of the funds requested for annualization of the additional spaces authorized in FY 1981. Since current case backlog and average case completion time estimates are even higher than those in the budget, this request is the bare minimum required. Remember, the less time it takes to complete an investigation, the less time is lost on important work and this all results in less cost to the American taxpayer.

Mr. Chairman that concludes my prepared statement. Since I am retiring next month, I would like to express my appreciation to the committee for the support they have provided in the past. I will be happy to attempt to answer any questions you may have.

PREPARED STATEMENT OF LT. GEN. G. J. POST, USAF

DIRECTOR

DEFENSE LOGISTICS AGENCY

Mr. Chairman, I have a prepared statement which, with your permission, I will submit for the record. It covers our Fiscal Year 1982 Budget Request and the programs it supports. I also have a short statement which I would like to read.

Before this year is out I will be retiring from the United States Air Force, so I have only a few months left as the Director of the Defense Logistics Agency. Rather than talk about what we plan to do in the next fiscal year, I'd like to tell you about some of the things that DLA did last year. The occasion is appropriate because there clearly is nothing personal to be gained. Besides, these things weren't done by me; they were done by the people who work in DLA, as fine a group of professional, dedicated people as I have seen.

In Fiscal Year 1980 our Property Disposal people saved the taxpayers almost a billion dollars, about 50% more than in the preceding year. It was done in three principal areas.

The value of Government property that the holder did not need but someone else did was $780 million. Our property reutilization system matched those in need with a government-owned source, and helped avoid an unnecessary purchase. This property is six or seven years old on the average and the $780 million is acquisition cost. If it were bought new last year it would have cost considerably more.

If there is no use for this property within the Federal Government or authorized state agencies, we sell it to the public. Last year we deposited $122 million to the Treasury from the proceeds of these sales. That's a 20% increase from the preceding year. Some of that can be attributed to inflation, but not all of it.

Our Property Disposal people also run DoD's Precious Metals Recovery Program. Last year we reclaimed $47 million of surplus precious metal bearing materials at an expense of $3.8 million.

We have another command, the Defense Industrial Plant Equipment Center (DIPEC) that manages idle DoD-owned industrial machines in a manner roughly similar to the way our Property Disposal organization handles property reutilization. DIPEC matches needs with idle assets. Last year the value of those matches -- which means purchases avoided -- was $37 million. That's not really a very good number because it's based on the acquisition cost of the equipment which averages twenty years old. We provided equipment with a current replacement cost of about $63 million just to support the Army's M-1 Tank Program.

Another area where we save large amounts of money is in our Parts Control Program. When the Military Services are deciding how to provision a new weapon system, this formal program closely screens each proposed new part to see if there is something already in the inventory that can be used as a substitute. A good example is the F-16. Without the Parts Control screen, that airplane would have come into the inventory with 13,000 new parts on it. That was cut to 10,300 new parts, and the plane is flying well. Last year we spent about $2.5 million on this control program, but we saved $149 million. That's a 60 to 1 payback.

Another area of substantial savings is in transportation. There are several initiatives going, but I'll cover just one. We have what we call the Challenge Program. Anytime we get a shipment that weighs more than 100 pounds that's designated by priority for air shipment, we go to the requisitioner and ask, "Do you really have to have this by air?" Frequently the answer is no. The program has been so successful that the Military Services have agreed to drop the challenge threshold to 50 pounds. Last year we saved a total of $45 million in transportation costs in getting our material to the customers.

A year ago we closed our depot at Dayton. We moved 425,000 line items of electronic supplies out of the warehouses there to our warehouses at Richmond, to Norfolk where the Navy handles our supplies for us, and to our depot at Ogden. That saved about 380 spaces and almost $3 million a year. There were other reorganizations, such as reducing the number of contract management area offices from 47 to 37. In total, these other actions resulted in almost $5 million in savings which will recur year after year.

There are other good things that we did last year that can't readily be quantified in dollar savings. For example, we reduced the processing time for several difficult -- and important -- types of transactions. To cite a specific instance, during the test of some new procedures the time between when a customer in Europe submits a requisition for an automotive part and when that part is delivered was cut in half.

Contracts awarded to blind or other handicapped industries more than doubled, from $14 million to $31 million. Awards to small businesses and to disadvantaged businesses increased 17% and 36%, respectively.

These savings and achievements are real and substantial. It is my belief that they were accomplished because the very high level of competency and dedication present in the DLA workforce allowed my staff and field commanders to concentrate on economy and efficiency as well as give intensive management to special programs.

Looking ahead on a couple of items, we plan to install modified versions of our standard material management system in the clothing and food commodities at our Personnel Support Center in Philadelphia. The current systems are just not doing the job. Also, we want to do better in our relations with contractors, expecially in the invoice payment process.

So there are some areas where we know we should be doing better, and we're moving as quickly as we can to make improvements. On balance though, I am convinced that DLA is a strong, healthy organization; one that I will be proud to turn over to my successor.

In closing, I can summarize our FY 1982 budget request in just a few words. As you can tell from the material we have submitted, our workloads continue to exceed our forecasts -- and so far this year are doing it again. Fortunately our productivity remains high, but we do need the additional personnel requested.

Mr. Chairman, this will be my last appearance before your Committee. I want to thank you for the support which you have given me in the past and which I am confident you will continue to give the Agency in the future.

Mr. Chairman and Committee Members:

It is my pleasure once again to appear before this Committee to discuss the resource requirements of the Defense Logistics Agency.

I will highlight the character and size of Agency programs, review with you Agency operational accomplishments and summarize our FY 1982 Budget Request.

CHARACTER AND MAGNITUDE OF PROGRAMS

The Defense Logistics Agency -- which was organized twenty years ago to bring the advantages of centralized management to Defense logistics -- is an essential part of the DoD logistics system and provides support to the Military Services worldwide. DLA buys, stores and provides a wide variety of consumable supplies, administers contracts and manages the reutilization and disposal of surplus personal property.

In addition to these prime mission assignments, we:

- -- Operate the Federal Catalog System in support of both U.S. military and civilian agencies as well as NATO members and other friendly foreign countries. The system provides item identification and technical description for all items of supply.
- -- Maintain, store and facilitate the re-use of Government-owned industrial equipment. In addition to avoiding numerous new purchases of equipment by encouraging the use of Government-owned assets, this program maintains the DoD's peacetime industrial base.
- -- Provide scientific and technical reports and information services to the Defense research and development community.

WORKLOADS

DLA's annual workloads, which generally have been increasing in recent years, vary according to the demands placed on the Agency by its Military Service customers. As a key logistics contributor to force readiness, we:

- -- Buy and supply fuels, food, uniforms and textiles, medical supplies and about half the hardware items used by the Armed Forces -- more than $13 billion in annual procurements.
- -- Receive and ship nearly 18 million line items from our depots.
- -- Process over 28 million supply requisitions each year, 72.5% of which are for items stocked in our distribution system.
- -- Administer over 290,000 contracts.
- -- Pay 3 million invoices totaling more than $31 billion.
- -- Manage the reutilization and disposal of surplus property having an acquisition value of $4.8 billion. This involves the receipt and shipment of nearly 6 million items.

Additionally, we:

- -- Maintain and make available scientific and technical information on over one million research and development reports.
- -- Make stock fund sales of nearly $16 billion from an inventory of just over $7 billion.

In our January Budget Request, we estimated FY 1981 and FY 1982 workloads to be greater than FY 1980 levels. Workloads thus far this year are running some 4.4% higher than the initial estimates, and we are confident that they will continue to increase.

RESOURCE SUMMARY

Although our workloads have been on the increase for the past several years, our authorized civilian employment over this same period has shown a decline. We have managed to accommodate increased workloads with reduced employment through an aggressive productivity improvement program. Our program has taken the form of increased automation, organizational streamlining, reduction of overhead, and other management improvements. Unless additional resources are provided, we cannot accommodate the significant workload increases in FY 1981 and FY 1982, an almost 12% increase over FY 1980, without unacceptable declines in the quality of our customer support. In recognition of this, additional resources are included in President Reagan's budget amendment.

ACCOMPLISHMENTS

I take great pride in the accomplishments DLA has achieved in improving operations. I would like to share with you some of our more significant attainments during FY 1980 and some of our planned initiatives for FY 1981.

Supply Operations

In supply operations, where we manage one-half of the consumable items used by DoD and we fill two-thirds of the DoD requisitions for stocked items, we:

-- Provided foreign and domestic disaster support in the form of tents and medical supplies to Thailand, the Central African Republic of Somalia, Pakistan, Liberia, St. Lucia Island and the Cuban refugees in the United States.

-- Tested a contractor-operated depot to supply parts for commercial automotive vehicles, materials handling and construction equipment to overseas customers. Since this effort has reduced the order-ship time from 69 to 35 days, we will expand coverage this year to approximately 50% of the overseas demand for commercial equipment parts.

DLA is responsible for some 200,000 supply items supporting major weapons systems such as the F-16, the M-1 tank, and the FFG-7 Frigate. We have intensified management efforts to improve support by establishing direct contact with the Military Service weapons systems managers and achieved a significant reduction in supply support request rejections.

We continued our highly successful airlift challenge program in which, with customer concurrence, we downgraded air-eligible shipments to less expensive methods of transportation. During FY 1980, our customers benefited to the extent of $13.6 million in costs avoided as the result of this effort.

Other transportation cost reduction actions during FY 1980 resulted in cost avoidance of an additional $32.0 million, largely the result of increased freight consolidation and increased utilization of available container cube.

We are testing a computerized freight consolidation procedure which is expected to reduce transportation and packaging costs significantly while decreasing cargo damage and pilferage. We also have developed an ADP system for planning sea van container loads and producing required shipment documentation. The system maximizes the utilization of the sea van cube and reduces the requirement for shipment planning personnel.

A year ago we closed our depot at Dayton, Ohio and moved our electronic supplies to our depots at Richmond, Virginia and Ogden, Utah and to the Navy depot at Norfolk, Virginia. This adjustment permitted savings of 380 personnel and almost $3 million annually.

Procurement

In an effort to improve our fuels contracting, we revised payment procedures to overseas contractors supplying fuel to military bases. This will assure prompt payment while protecting the Government's interest. Our first long-term contracts using these parallel commercial practices were awarded in FY 1980 and extend over a five-year period.

In our non-fuels purchases, we are testing an exception to the Maybank Amendment which permits paying a premium of up to 5% on DLA non-fuel labor surplus area set-aside contracts. The results of the test -- cost of the premium, new jobs created in labor surplus areas, and jobs lost in non-labor surplus areas -- will be reported to the Congress later this year.

Of the total $8.4 billion which we placed in prime contracts with U.S. business firms in FY 1980, $3.3 billion went to small businesses with $290 million awarded to small disadvantaged business firms. This resulted in increases of 17% and 36%, respectively, from the prior year. In addition, contracts awarded to blind or other handicapped industries more than doubled, from $14 to $31 million.

In an effort to reduce the potential for overpricing, DLA initiated a study in 1979 to identify the extent of the problem and to make recommendations for improvement. Corrective actions have been taken to increase the number of post-award reviews, to record alternate part numbers, to provide additional training for small purchase buyers, to identify more vendors and to obtain descriptive data and purchase history when items are transferred to DLA from the Services. In addition, we established a "feedback from users" system to help identify any potential overpricing. These actions have resulted in the discovery of overpricing and savings have been achieved through contractor refunds or order cancellations with reorder from other vendors.

Contract Administration

We have continued to develop and implement new ADP based methods and procedures to improve contract administration support.

-- The automated progress payment system that I addressed last year is now fully operational.

-- A new system is being implemented which will provide transportation cost data to the Military Departments in order to assist the Department in more accurately budgeting and controlling transportation funds.

-- A system has been developed which identifies major weapon systems contracts and contractors performing on contracts that are affected by an energy shortage or curtailment, the items they are producing, and their ability to shift to alternate energy sources.

We have taken several actions to review contractor practices to assure costs charged to Government contracts are fair and reasonable. During FY 1980, we:

-- Reduced contractor price proposals by $980 million through technical analysis of the proposals for DoD buying activities.

-- Achieved a cost avoidance of over $79 million by reviewing and approving contractor purchasing procedures for charging materials, supplies and services to the Government.

-- Saved $41 million through review of contractor budget and control procedures rather than relying upon after-the-fact review of costs incurred. The data developed were used to negotiate pricing rate agreements, settle final overhead rates, or issue notice of intent to disallow or not recognize costs.

-- Reduced potential charges by $15.8 million related to contractor insurance and pension programs and to contractor employee compensation programs.

-- Saved $15.1 million in transportation and packaging costs by reducing contractor packaging price proposals, consolidating shipments, and changing packaging contractual requirements.

In our Quality Assurance Program, we are in the process of expanding the Contractor Assessment Program (CAP) to all contractors. The CAP is a broadly-based motivational award approach to excellence in product quality through public recognition of demonstrated quality of performance. The program will benefit both industry and Government.

As a part of our continuing review of organizational structure, we began in October 1979 to realign our Defense Contract Administration Services Management Areas. This realignment, which was completed in September 1980, reduced the number of offices from 47 to 37 and produced annual savings of $2.4 million. We also merged our contract administration and production functions at our 9 DCAS Regions and 37 management areas. This allowed us to reduce overhead -- a reduction of 85 positions -- and realize annual savings of approximately $2.4 million.

Other Logistics Programs

We have continued efforts to use commercial specifications where they make sense rather than purchasing against Government specifications. During FY 1980, we notified the Military Services of 355 Government specifications with potential for conversion to commercial item descriptions. Also, 181 industry standards were adopted and we are reviewing another 306 for possible adoption.

We manage the DoD Disposal Program and in this capacity achieved savings of approximately $1 billion -- an increase from the preceding year of more than 50%. This was done in three principal areas:

-- The reutilization of Government property avoided some $780 million in costs since we were able to match requirements with excess property. This property is six or seven years old on the average and the $780 million is acquisition price. If it were bought last year it would have cost considerably more.

-- If there is no use for excess property within the Federal Government or among authorized state agencies, we sell it to the public. Last year we deposited $122 million to the Treasury from the proceeds of these sales. That's a 20% increase from the preceding year. Some of that can be attributed to inflation, but not all of it.

-- The Precious Metals Recovery Program, a self-supporting reclamation effort financed by the sale of metals for use as Government-furnished material, had an outstanding year in FY 1980. We recovered more than 2 million troy ounces of silver -- up more than 13% over FY 1979 levels -- from articles such as used film, photographic solutions and torpedo batteries. More than 7,000 troy ounces of gold from circuit boards and electronic scrap were also recovered. The market value of all precious metals recovered during the year exceeded $47 million at an expense of $3.8 million. We plan, during FY 1981, to sustain our improved recovery rate for gold and silver and to recover 8,000 troy ounces from the platinum family metals.

Our Parts Control System minimizes the number of new parts entering the supply system by helping contractors to select existing part types during the design stage. During Fiscal Year 1980, we considered 531 contracts, reviewed over 80 thousand part types, and replaced nearly 18 thousand nonstandard items with existing standard part types. This resulted in a cost avoidance of nearly $149 million.

Personnel

DLA negotiated its first Agency-wide collective bargaining agreement in FY 1980. The negotiations were completed in only a few weeks without resorting to outside assistance. This, we believe, is one of the positive results of a labor/management approach which has resulted in one of the best labor/management relationships in the Federal Government.

Our Equal Employment Opportunity Program has as its objective a fully integrated work force in all organizations, occupations and grade levels. Recent data show that the representation rate for minorities (non-whites) was 28.2%; for Hispanics, 2.9%; and for all women was 40.9%. These rates were above any previously experienced by the Agency. We also had significant increases in the representation of minorities and women in the middle and high grades as well as in the major career fields.

For the seventh time in the last eight years, DLA's suggestion program was recognized as having the best overall performance in the Federal Government. The award, which was made by the National Association of Suggestion Systems, is based on quality and level of participation in the program. During FY 1980, the Agency realized tangible benefits of $1.9 million through suggestions submitted by employees.

Looking to the future personnel needs of the Agency, we established a centralized intern training facility in 1977. Since then, 288 interns have been recruited and have received training in such program areas as: Supply Management; Acquisition; Automatic Data Processing; Civilian Personnel; Property Disposal; and Financial Management. 55% of those participating were already Agency employees when selected while 56% of the total selectees were minority members or women.

I feel sure that this investment will pay generous dividends in improved operations over the years ahead.

Fraud Prevention

One of our main concerns is to insure that investigation of suspected wrongdoing is pursued vigorously. We will, in cooperation with the Defense Investigative Service (DIS), establish a resident criminal investigator program as a result of a successful pilot test of the concept. The resident investigator's task will be to investigate criminal incidents -- both white collar and crimes involving theft of Government property -- occurring at a DLA activity. Past performance by DIS argues well for this new effort and I anticipate a high payoff from this expanded coverage.

During Fiscal Year 1980, DLA requested a total of 600 criminal investigations; of this total, 508 dealt with suspected contractor fraud or with violation of the public trust by our employees and others not affiliated with the Agency. In some cases, investigation disproved allegations of misconduct; in others, prosecution was declined because of insufficient evidence. Where the evidence is sufficient, we use the "triple threat" approach of criminal prosecution, civil recovery and administrative action such as suspension or debarment.

In cases where improper charging of costs to DoD contracts is suspected, we use an investigating team consisting of a Defense Investigative Service investigator as team chief, a Defense Contract Audit Agency auditor, a DLA pricing specialist and a DLA attorney to conduct the investigation. Just recently, we had our first successful prosecution since we began using this team approach. A contractor firm and two of its vice-presidents were convicted of making false statements and a fine of $700,000 was imposed on the firm. We will seek to recover the overcharges separately. Since the number of mischarging cases is on the rise, this initial victory and the lessons we learned in the process should help; it should also serve as a deterrent to contractors contemplating overcharging.

Although contractor fraud is one of the major areas that we monitor, DLA must guard against employee misconduct. By and large, our employees live up to the high standards of honesty and integrity that we expect. Where we find deviations from these standards, however, we move forcefully. We took disciplinary action against 36 employees last fiscal year for infractions such as theft of Government property, falsification of travel vouchers or leave records, and misuse of Government property. Ten of these employees were fired and four more, who would have been fired, chose to resign or retire.

Although our aggressive program of detection, investigation and prosecution is proving increasingly successful, we are also interested in measures which will prevent criminal acts. Accordingly, we have expanded and refined our crime prevention survey program. During FY 1980, the four Defense Investigative agencies, at our request, conducted 73 crime prevention surveys at DLA activities and in the process discovered eight instances requiring initiation of criminal investigation.

Included in the crime prevention surveys are the automated data processing systems that we operate. In FY 1980, our computer security specialists conducted risk analyses on all our ADP facilities to determine the effectiveness of our program. We also have developed a computer based Management Information System for our anti-fraud efforts which includes a data bank containing all suspected criminal incidents involving DLA since 1970. We will use the system to identify trends which may be indicative of weaknesses in our operation. This may permit us to take action before we are victimized -- it will certainly permit better oversight of open cases.

A final aspect of our fraud prevention program involves training. During FY 1980, we planned, organized and presented a five-day fraud detection seminar which was attended by Air Force OSI, Army CID and selected DLA personnel performing functions prone to white collar crime. Additionally, a number of our employees have attended the White Collar Crime Seminar presented by the Federal Law Enforcement Training Center.

FY 1982 APPROPRIATIONS

Our Operation and Maintenance request of $1,292.444 million is $59.467 million greater than our FY 1981 availability. It consists of increases of $69.462 million offset by decreases of $9.995 million. The increases fall into two categories: $27.695 million for price growth and $41.767 million in program growth.

Increases

The amount requested for price growth includes:

-- $7.076 million as Annualization of FY 1981 Pay Increases for Wage Board and Foreign National Personnel.

-- $20.619 million for inflation in the price of purchased goods and services.

Program growth changes are:

-- $.622 million for payments to the Department of Labor as reimbursement for benefits paid to our employees under the Federal Employees Compensation Program.

-- $24.972 million for the financing of additional work years required to process expected workload increases.

-- $3.004 million of which $1.484 million is required as the result of the discontinuation of telecommunications bulk rate service. The remaining increase of $1.520 million is required to modify or maintain various telecommunications systems/projects.

-- $13.169 million for modernization of our Automatic Data Processing equipment. Our Automated Data Processing Equipment Replacement Program (ADPER) requires a substantial investment over the next several years to bring our computer equipment up to present standards of reliability, maintainability and capability. The ADPER increase needed in FY 1982 is $10.459 million. $2.710 million is requested for augmentation of the Defense Integrated Data System and for short term interim improvements to other automated information systems prior to completion of the total ADPER effort.

Decreases

The total decrease is $9.995 million. $3.966 million is the result of functional transfers involving the Department of the Navy ($3.044 million) and Department of Education ($.922 million). We plan to reduce $4.000 million by withdrawing from contractual efforts designed to identify minority business firms which possess the potential for participating in Defense production programs. While increased contracting opportunities are highly desirable, we believe they can be achieved without these contracts. We also plan a reduction of $2.029 million in real property maintenance resources. This will permit us to maintain the backlog of essential maintenance and repair at FY 1981 levels.

OTHER APPROPRIATIONS

Mr. Chairman, I would like to briefly address our other appropriation requirements.

Procurement

Our FY 1982 request for procurement funding is $17.592 million. Included is $2.675 million for the procurement of automotive equipment; $3.743 million for mobile materials handling equipment; $2.884 million for purchase of ADP equipment currently leased; and $2.583 million for the replacement of currently owned telecommunications equipment. The remaining $5.707 million is primarily for items such as cranes, pumps, air compressors and replacement office equipment, miscellaneous warehouse equipment and industrial facilities equipment.

Military Construction

We are requesting $71.554 million for our Military Construction Program in FY 1982. $47.100 million is required for fuel storage at Wake Island, Korea and Hawaii. We plan to spend an additional $5.600 million to construct a hazardous materials storage facility at our Defense General Supply Center in Richmond, Virginia. In addition, $5.320 million is programmed for nine projects under the Energy Conservation Investment Program (ECIP). The remaining $13.534 million is for such projects as expanding a mechanized freight terminal, upgrading an ADP facility, relocating one of our disposal offices and constructing pesticide storage.

Research, Development, Test and Evaluation

DLA does not perform research and development as such; we do, however, operate the Defense Technical Information Center (DTIC) which provides information on completed and ongoing projects to the RDT&E community. In addition, ten contractor-operated Information Analysis Centers are financed under this appropriation. These centers collect, store and disseminate scientific and technical information in highly specialized fields. We are seeking $18.506 million in FY 1982 for these purposes.

CONCLUSION

Mr. Chairman, this will be my last appearance before your Committee as I will be retiring before the year is completed. Before responding to your questions, I would like to make a few additional comments.

I have highlighted many improvements and significant accomplishments. The savings are real and substantial. They were accomplished because of the competency of the DLA military and civilian work force -- as fine a group of professional, dedicated people as I have had the pleasure to be associated with during my career. We do recognize, however, that there are areas where we could be doing better, and we are moving as quickly as we can to make the necessary changes.

As you can tell from the data we submitted, our workloads continue to increase and exceed our forecasts. Fortunately, our productivity remains high and our support to the Military Services effective. I would like to stress that the budget we have requested represents the minimum needed to continue the logistics support essential to the Military Services.

Lastly, I want to thank you for the support which you have given me in the past and which I am confident you will continue to give the Agency in the future.

I will now try to answer any questions you may have.

PREPARED STATEMENT OF MAJ. GEN. WILLIAM L. NICHOLSON III, USAF

DIRECTOR

DEFENSE MAPPING AGENCY

Mr. Chairman and Members of the Committee:

I welcome this opportunity to present the Defense Mapping Agency's (DMA) budget request for fiscal year 1982, including adjustments resulting from the proposed program supplemental for fiscal year 1981 and the amendment for fiscal year 1982.

INTRODUCTION

The need for mapping, charting, and geodesy (MC&G) production continues at a high level. Our products support the military planners, the flight crew, the missile enroute to a target, the combat soldier in the field, the marine aboard ship, and the seaman on station armed with nuclear missiles. Wherever our servicemen are stationed or whatever their duties, they require MC&G support in the performance of their mission. Additionally, DMA has a related statutory responsibility to support the civil maritime community with up-to-date and adequate navigational materials. We also have worked with NASA since the beginning of the space program. In fact, Astronauts Young and Crippen used DMA-produced star charts and unique maps during the flight and landing of the Space Shuttle Columbia.

DMA PRODUCTION FACILITIES

DMA has two principal production facilities providing MC&G products, data, and services to the Armed Forces. The first of these, the DMA Aerospace Center in St. Louis, Missouri, provides aeronautical charts, air target materials, digital data, point positioning data bases, flight information publications, space mission charts, and a wide spectrum of technical data relevant to the earth and its aerospace environment essential to navigation and missilery. Most of this production supports manned and unmanned aerospace weapons. The field office at Kansas City, Missouri, supplements the St. Louis facility in this production.

The other major production center is the DMA Hydrographic/Topographic Center at Brookmont, Maryland. Its production includes hydrographic charts and related data for surface and subsurface navigation, topographic maps for land forces, Digital Terrain Elevation Data for the cruise missile, as well as some products for air operations. Augmenting this center's production are field offices at San Antonio, Texas, Providence, Rhode Island, and Louisville, Kentucky.

OTHER DMA ACTIVITIES

Another DMA activity, the Inter American Geodetic Survey (IAGS) founded in 1946, assists Latin American cartographic agencies in performing surveys and producing maps and charts under mutually beneficial cooperative agreements. The Defense Mapping School at Fort Belvoir, Virginia, trains members of the Armed Forces, other government agencies, and our allies in the use and production of MC&G products. The DMA Office of Distribution Services at Brookmont, Maryland, provides DMA products and services to all users, and has twelve subunits in various locations around the world.

To utilize other sources of MC&G information and products, we work closely with the U. S. Geological Survey, the National Ocean Survey, and 80 other nations with whom exchange agreements have been negotiated.

PRODUCTION PRIORITIES

Today, our production is limited to those products critical to near term military requirements. Our first priority is support of the strategic nuclear force, including the various cruise missile programs, and to providing products that are critical to safety of flight and navigation at sea. Our second priority is to support tactical forces. This effort is concentrated on meeting the requirements of the Rapid Deployment Force and tactical weapons such as PERSHING II and FIREFINDER. Because of the overwhelming need to support production requirements in these categories, there is very little capacity available for other requirements which have been deferred, considering levels of prudent risk. To meet the critical production schedules, much of our work force is on a three-shift, six- to seven-day week.

PRODUCTION OPERATIONS AND PROGRAMS

Our job would be easier and less costly if it were simply a matter of the one-time development of a given product for a specific purpose in a particular geographic area. However, it is not that simple because man is constantly changing both the earth's surface and its cultural features. Consequently, much of our production effort must be directed toward maintaining the accuracy and currency of our products. This encompasses the immediate issuance of correction notices to users when new information critical to safe navigation is received and the revision, recompilation, printing, and distribution of corrected products. Maintenance, of course, is not our only concern--new and improved operational weapons systems with increased accuracies, faster speeds, longer ranges, better penetration capabilities, and more sophisticated guidance systems have required changes and improvements in MC&G data commensurate with the advances in hardware technologies. Much of the change involves the use of digital cartographic products for purposes which cannot be satisfied by conventional paper graphics.

In recent years, there has been a veritable explosion in the use of digital data for user applications, as well as for in-house production processes. Increasingly, our products are for use directly by computers in new weapons systems and simulators. This imposes strict quality constraints on the data we produce. Products that are tailored for machine use in systems such as the cruise missile must be produced to close tolerances which leave little room for compromise with MC&G accuracies. The digital data to meet these requirements are produced by highly skilled technicians using complex, state-of-the-art stereocompilation equipment, supported by a large volume data processing capability. Unfortunately, the advent of new, high priority requirements for digital data, principally for strategic systems, has not been accompanied by a reduction in the requirements to support general purpose forces with conventional products. In fact, the need for contingency products in some of the more remote areas of the world has become more urgent.

CRUISE MISSILE SUPPORT

We are on schedule with production of digital data for the nuclear cruise missiles: air, sea, and ground launched. The first production phase is the Digital Terrain Elevation Data (DTED), used for missile route penetration planning to the target. The second, Terrain Contour Matching (TERCOM) data, is similar to DTED but much more detailed for missile guidance. It is produced for selected areas and is used in the missile's on-board computer to update the inertial guidance system to assure accurate penetration to the target. The third, Vertical Obstruction Data (VOD), is needed for low level penetration of air defenses. The production of the first two phases is on schedule. Both final requirements and production techniques for Vertical Obstruction Data are continuing to be refined with full production scheduled to start this spring.

RAPID DEPLOYMENT FORCE

When the decision was made in early 1980 to establish the Rapid Deployment Force, requirements were levied on the Agency to accelerate the production of products for areas of the world which had not been previously identified as high priority to the United States' strategic interests. Consequently, DMA had not scheduled products in those areas for production in the near term.

RDF requirements have now been fully identified and consist of approximately 5,800 map and chart products and 930,000 square nautical miles of point positioning data bases (PPDB). First-time coverage is required for many areas and existing products need updating for currency and accuracy. DMA has programmed production and maintenance of about 4,000 of the products and the entire PPDB requirement. The work involves using specialized source material to produce large scale maps and charts for contingency operations. The Department of Military Survey, United Kingdom, is providing assistance in meeting our total objective which should permit this Agency to have all products produced and into distribution by the end of FY 1986. Distribution plans have been developed and are being implemented.

The Rapid Deployment Force requirements focus on the Persian Gulf Region, whereas those for cruise missile currently focus on the USSR; thus, we now find ourselves in the position of simultaneously producing charts for both areas to meet urgent needs.

TOTAL DMA FUNDING REQUEST

I now will talk about our funding request for fiscal year 1982. In the aggregate for O&M, Procurement, RDT&E, and equivalent Military Personnel expenses, we are requesting $371 million. This is a net increase of $7.9 million over the current fiscal year 1981 request of $363.1 million. The increase includes $2.6 million for statutory pay increases and $8.5 million for cost escalation. The result is a net decrease of $3.2 million related to program growth. Program growth of $10.0 million in O&M and $4.8 million in RDT&E are offset by a reduction of $18.0 million in Procurement. The decrease in Procurement is directly related to the fact that the majority of the equipment needed to support increased production of maps and charts for the Rapid Deployment Force and cruise missiles was purchased in previous fiscal years. Details of the net program changes are contained in our justification materials; accordingly, I will discuss only the more significant changes within each appropriation.

OPERATION AND MAINTENANCE

For the Operation and Maintenance appropriation, we are requesting $326.1 million for fiscal year 1982--an increase over fiscal year 1981 of $19.7 million. Of this amount, $2.6 million is for statutory pay increases and $7.1 million is for inflation. The remaining net increase of $10.0 million is detailed by line item on our Schedule of Increases and Decreases. Major increases are: $2.8 million, including 83 workyears, to meet the Rapid Deployment Force requirements; $1.0 million for a classified project; $1.8 million to upgrade scientific computers to meet production workloads; $1.0 million in base operations primarily for real property maintenance and repair; $3.5 million to revise, optimize, and standardize computer programs that support production; and, $900 thousand for increased support of field survey team efforts related to the MX test and evaluation program.

The foregoing increases are partially offset by other relatively minor adjustments which total to a reduction of $1.0 million.

PROCUREMENT

For the Procurement appropriation, we are requesting $8.3 million for fiscal year 1982. This is a net decrease of $17.6 million from fiscal year 1981 and is composed of an increase of $500 thousand for inflation and a program decrease of $18.1 million. The fiscal year 1982 request shows a significant decrease partly because equipment needed to support the production of maps and charts for the Rapid Deployment Force and to support cruise missile production requirements was procured in prior fiscal years.

The fiscal year 1982 requested amounts are to support the overall DMA mission as opposed to any of the above unique requirements. We intend to use fiscal year 1982 funds for equipment to produce MC&G data which are integral parts of advanced strategic and tactical weapon systems and other products that support military land, sea, and air operations as well as contingency plans. For example, $3.0 million of the fiscal year 1982 request is for cartographic equipment. Most of these funds, $2.5 million to be exact, are requested to purchase 19 Computer Assisted Photo Interpretation (CAPI) systems. The CAPI systems will be used to help meet Air Force and Navy requirements for 19 million square miles of digital data supporting radar scope simulation in weapon system trainers and will increase workforce productivity in that area. In addition, $1.6 million is for replacement of items which have exceeded their useful life.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

For the Research, Development, Test and Evaluation (RDT&E) appropriation, we are requesting $25.9 million for fiscal year 1982, an increase of $5.7 million over fiscal year 1981. This represents an increase of $4.8 million for program requirements and $.9 million for inflation. The major portion of this increase is required to provide essential geodetic and geophysical support for the MX missile system. The basic purpose of the DMA RDT&E program is to increase MC&G productivity through the use of an expanding digital production technology. The achievement of this productivity is critical to our continuing ability to satisfy increasing and more stringent MC&G requirements in support of DoD weapons systems such as MX, TRIDENT, PERSHING II, and cruise missile systems. Today, DMA's mapping production system uses a combination of analog, digital, and supporting data as our primary means to provide the necessary MC&G products and services. Currently, we have been able to automate the mapping functions to a limited extent. During the mid 1990s, we will see the culmination of efforts providing DMA with virtually a total digital production system. Our efforts during fiscal year 1982 and the rest of the 1980s will continue to be directed toward this objective with developments in technology areas such as advanced feature analysis, stereoscopic reconstruction, data base mass storage, data base management, and wideband communications. We will also continue the expansion of automation technology in production areas that are labor intensive. DMA envisions being in a total digital production posture by the mid 1990s. If the technology evolves, this objective will be realized. DMA has and will continue to devote a major portion of its R&D resources toward the development of a total digital production capability. This capability is critical for increasing MC&G productivity necessary to meet projected DoD needs.

SUMMARY

In summary, Mr. Chairman, the fiscal year 1982 budget request totalling $371 million will enable DMA to meet the most urgent and higher priority requirements of our Armed Forces for MC&G data, products, and services. In meeting these requirements, DMA will continue its efforts to make this a cost effective contribution to improved force readiness.

Thank you, Mr. Chairman. We will be happy to respond to your questions.

PREPARED STATEMENT OF LT. GEN. HARRY A. GRIFFITH, USA

DIRECTOR

DEFENSE NUCLEAR AGENCY

Mr. Chairman and Members of the Committee:

I am Lieutenant General Harry Griffith, Director of the Defense Nuclear Agency (DNA). I am happy to testify today on behalf of the Agency's Fiscal Year 1982 budget request. I will review for you DNA's missions and summarize our total budget request. Then I will highlight our recent accomplishments and planned activities for the coming year in the areas of (1) research, development, test and evaluation (RDT&E); (2) operation and maintenance (O&M); and (3) procurement.

DNA'S MISSIONS

The Defense Nuclear Agency is responsible within the Department of Defense (DoD) for a wide range of functions related to nuclear weapons. In particular, DNA is the principal agency within the DoD for research, development and testing in the area of nuclear weapons effects. We develop weapons effects simulators and conduct all underground nuclear weapons effects tests for the DoD. In carrying out this broad mission, DNA maintains close liaison with each of the military services, other federal agencies and the Office of the Secretary of Defense (OSD) to ensure that our research meets both present and projected weapon system requirements and intelligence needs. We are, of course, at the service of the Congress and the Executive Branch as well.

DNA's RDT&E programs provide data on the effectiveness of nuclear weapons (ours and those of potential enemies); nuclear vulnerability and hardening information for systems, forces, and critical military targets; methodology for nuclear weapons targeting; improvements in the survivability of our theater nuclear forces; research into physical security of nuclear weapons; biomedical data on nuclear weapons effects; and so forth.

In the area of operations and support, DNA performs numerous functions related to nuclear weapons; we inspect nuclear-capable units of all Services; formulate nuclear weapons accident procedures and training doctrine as well as conduct major exercises; provide support to comprehensive test ban negotiations; take the lead in developing a DoD Overseas Nuclear Emergency Search Team (ONEST) capability; administer the facilities on Johnston Atoll; oversee, with the Department of Energy (DoE), the national atmospheric nuclear test readiness program under SAFEGUARD C to a Limited Test Ban Treaty; manage the US nuclear weapons stockpile; coordinate with Military Departments in establishing nuclear weapons safety rules; and carry out numerous other activities related to nuclear weapons.

Finally, DNA's role in nuclear weapon security and counternuclear terrorism crosses both operational and RDT&E areas. We assist in assuring that the physical security, intelligence, and special operations communities integrate their effort in protection of US nuclear weapons worldwide. DNA manages the exploratory development of DoD physical security systems to assist in integration of the overall DoD physical security RDT&E program.

Some of the exploratory development is devoted to supporting counterterrorism RDT&E projects. Operational support of specified national counterterrorism programs includes establishment of this nation's overseas ONEST program and maintenance of continuous capability to conduct an emergency US nuclear stockpile verification. DNA provides nuclear effects input to the Federal Emergency Management Agency (FEMA) and maintains a close technical exchange relationship with DOE and Nuclear Regulatory Commission (NRC). DNA is the proponent for DOD nuclear weapon security criteria.

SUMMARY OF DNA'S BUDGET

The Defense Nuclear Agency's budget request for FY 1982 is $338,078,000 as shown in Table I.

TABLE I
Defense Nuclear Agency Budget
(Dollars in Thousands)

Appropriation	FY 1980	FY 1981	FY 1982
Research, Developmnet, Test and Evaluation	179,150	201,771	302,078
Operation and Maintenance	28,935	30,208	33,570
Procurement	832	1,605	1,930
Military Construction	--	--	500
Total DNA	208,917	233,584	338,078

For FY 1982, RDT&E accounts for 89 percent of the total budget request; O&M for 10 percent; and Procurement and Military Construction for one percent.

RESEARCH, DEVELOPMENT, TEST & EVALUATION

DNA's RDT&E projects and funding levels are summarized in Table II by application areas.

TABLE II
RDT&E PROGRAM
(Dollars in Thousands)

Project	FY 1980 Actual	FY 1981 Estimate	FY 1982 Estimate
Aerospace Sys. Vulner. & Hardening (V&H)	8,623	8,700	10,400
Command, Control, and Communications (C^3)	5,178	4,700	2,900
Effects/Vulnerability Asses. & Data Eval.	9,984	13,071	12,878
High Alt. Phenomenology & Applications	5,136	6,500	10,500
Lab. Radiation Simulator Development	13,219	13,800	19,300
Biomedical Effects Research	11,648	12,600	16,000
Tactical Systems Vulner. & Hardening	20,295	24,000	23,900
Strategic Nuclear Implications & Asses.	3,948	4,000	5,400
Nuclear Effects on Electronics	13,022	12,300	14,500
Strategic Structures Vulner. & Hardening	10,252	10,000	21,800
Effects Simulation Using Radiation Simu.	16,289	27,600	46,900
Effects Simulation Using High Explosives	8,106	11,900	12,100
Effects Simulation Using Natural Disturb.	7,714	6,800	6,400
Underground Nuclear Tests	28,566	25,100	73,000
Theater Nuclear Forces Surviv. & Secur.	12,419	15,300	17,900
Physical Security	4,751	5,400	8,200
TOTAL DIRECT OBLIGATIONAL AUTHORITY (DNA)	179,150	201,771	302,078
TOTAL REIMBURSABLE OBLIGATIONAL AUTHORITY	1,221	6,100	3,900
TOTAL RDT&E (INCLUDING REIMBURSABLES)	180,371	207,871	305,978

I will first present the research we are pursuing in support of our strategic systems. Then I will review the programs to improve the survivability and endurance of communications, command, control, and intelligence (C^3I) systems. Next, I will discuss our evolving program supporting theater nuclear forces, followed by our physical security program and then I will outline our test programs for improving and validating the nuclear survivability of military systems. This latter summary will include both underground nuclear testing and the use of aboveground simulators. Finally, I will discuss our research in biomedical effects, including our Nuclear Test Personnel Review (NTPR) program for developing information on personnel exposure to ionizing radiation in past atmospheric nuclear tests.

Before starting on this agenda, however, I want to take special note of the fact that our FY 1982 budget submission, as amended, is designed to revitalize our efforts in basic nuclear weapons effects technology. Over the past several years, DNA has had to divert funding to address many system specific problems at the expense of the underground nuclear test program and the maintenance of the technology base program. It is most significant that this unfortunate trend now will be reversed.

Strategic Systems

Our RDT&E program in nuclear weapons effects addresses all elements of the strategic triad; ICBM's, aircraft, and the SLBM's. This program is closely coordinated with all Services and USDRE. We also support OSD (Policy), the Joint Strategic Target Planning Staff (JSTPS), and the intelligence community in the exploitation of weapons efforts for targeting. DNA is continuing to provide substantial support to the Air Force in development of the M-X weapon system. We have been a key player in the coordination of the different basing modes for the M-X system. Our M-X nuclear hardening and survivability program, managed in close coordination with the Air Force, contributes directly to the design and validation testing of the missile, protective shelter, and supporting C^3. We also support advanced research directly applicable to M-X site security. This past year, we were instrumental in identifying key nuclear survivability issues and in providing technical guidance which led to the Air Forces' decision on the spacing of the protective shelters. A DNA Task Force proposed the present electromagnetic pulse (EMP) protection scheme which permits close spacing of the shelters at substantial savings in cost and land requirements. Other review groups have been established under DNA auspices to ensure that all aspects of the M-X weapon system design meet nuclear survivability goals.

A major thrust of our M-X support in the coming year will be the development of source region EMP (SREMP) and blast simulators for validating the hardness of full-size protective shelters. The technical challenge lies both in the scale of the simulators (nothing comparable presently exists) and the complexity of the nuclear environments resulting from the many closely timed and regularly spaced bursts (i.e., multi-burst environment) presumed in the threat scenario. We also are developing test capabilities for combined in-flight loads on the missile. An underground nuclear test is planned for September 1982 to investigate the adequacy of the present design.

As you know, the Army's Low Altitude Defense (LoAD) anti-ballistic missile system is being considered as a defender of M-X in lieu of adding additional protective shelters in the event of a major growth in the perceived Soviet threat against M-X. Some of the technical uncertainties confronting the LoAD concept have to do with its performance in a multi-burst nuclear environment. To support this development, DNA recently has begun a joint nuclear hardness and survivability program with the Army similar to the one we have with the Air Force on M-X. This program will define nuclear environments, develop test techniques, and generate component hardness data for the LoAD interceptor, radar and data processor.

With regard to advanced strategic system technologies, we are participating actively in the Air Force's Strategic Missile Systems 2000 study, aimed at identifying future mission needs, system concepts, and associated technology requirements over the next several decades. Our work on secure basing and advanced reentry vehicle technologies will contribute directly to this important study.

In the area of strategic aircraft systems, we are assisting the Air Force in assessing the hardness of the B-52 and the air-launched cruise missile (ALCM). Our aircraft structural response program deals with thermal hardening schemes for aircraft and crew protection, blast damage avoidance, and damage tolerance criteria. We are making substantial progress in determining the vulnerability of aircraft to EMP. A joint EMP assessment program with the Navy will have immediate application to the Air Force Strategic Aircraft Protection Program to be initiated on the FB-111.

DNA is continuing its successful efforts with the Navy to improve the survivability of submarines to underwater nuclear explosions. We have developed new methods for predicting shock pressure loadings on submarine hulls, replacing mostly empirical procedures, and are now better able to protect critical internal equipments. The successful transfer of this technology to participating Navy laboratories and the incorporation of improved shock resistance techniques into Navy submarine design procedures are significant accomplishments. Other aspects of underwater explosion phenomenology on which we will be working relate to the generation of water waves, shock environments in shallow water, and cavitation loading effects on surface ships.

An area of renewed interest is the acoustic reverberations resulting from nuclear detonations in deep ocean basins (sometimes referred to as BLUEOUT).

In cooperation with the intelligence community, DNA is conducting several important programs on the physical and functional vulnerability of Soviet strategic targets.

In support of JSTPS, SAC and OSD, DNA is involved in research activities related to strategic nuclear weapon targeting methodology and employment as a basis for further development and implementation of national strategic targeting policy. We also actively support the recently established Joint Security Connectivity Staff in its efforts to analyze strategic connectivity under nuclear attack. To provide increased flexibility in nuclear weapon employment options, we are examining alternative uses of strategic nuclear forces against various aspects of the Soviet military force structure, political, governmental, and economic installations. Automated procedures are being developed for the JSTPS and the nuclear force commanders to implement these alternate targeting strategies. Our research is also placing substantial emphasis on the implication of protracted nuclear war in support of guidance contained in PD-59 Presidential policy directive and the Nuclear Weapon Employment Policy (NUWEP).

C^3I Systems

I will now discuss our program on survivability of communications, command, control and intelligence (C^3I) systems. For the most part, this activity directly supports our strategic activities; a lesser, but growing, effort relates to our theater nuclear force program which I shall cover subsequently.

There is widespread recognition of the need to enhance the survivability and reliability of C^3I systems to meet the needs of the National Command Authorities (NCA), as well as individual commanders, during all stages of nuclear conflict. DNA's program is intended to provide the technology and data base necessary for C^3I planners to meet these goals; that is, to ensure that systems (a) are designed to mitigate damage from nearby nuclear explosions, (b) are not subject to single-point vulnerabilities, and (c) are not degraded from the long-range effects of electromagnetic pulse (EMP) and propagation disturbances.

Satellites are among the most critical of our communication assets and of growing importance to the national defense. The detonation of weapons at altitudes above 100 kilometers poses a threat to both satellites as well as disrupting the radio frequency signals joining the satellites and ground stations and/or airborne platforms.

In the absence of atmospheric testing, we must rely on theoretical calculations supported by experimental simulations using the naturally or artifically disturbed ionosphere to gain a deeper understanding of radio frequency propagation disturbances. In our most recent and important such simulation conducted at Eglin AFB this past December, barium ionization clouds were released at an altitude of 180 kilometers and radio transmissions were made through the disturbed environment to test spread spectrum system concepts--such as those used in DSCS III and GPS--proposed to mitigate the disrupting effects. Preliminary data review indicates complete experimental success and the data are now being evaluated. Future experiments using high altitude barium releases and measurements in the naturally disturbed ionosphere are planned for the polar regions to further reduce propagation disturbance uncertainties.

Direct exposure of a satellite to nuclear radiation from a high altitude burst can create electrical currents in and on the satellite itself. A major portion of the DNA C^3I program is devoted to understanding these effects as well as providing facilities to demonstrate hardening techniques for our satellites. The cornerstone of our hardness verification capability for satellites will be the Satellite X-ray Test Facility (SXTF) now in development. The SXTF concept and capabilities have been described to you in previous years, and I will report upon its status in a few moments. Since the SXTF will not be on-line until 1984, we must rely on underground nuclear testing for hardness verification in the interim. Over the past several years, we have been conducting experiments on satellite components of increasing complexity. Last June, we exposed a full size satellite-like test article in the HURON KING underground test. The results showed that techniques used to protect military satellites from X-ray damage are generally effective. These tests are absolutely essential if we are to have confidence in nuclear survivability of our military systems.

Of comparable significance to satellite hardening is the susceptibility to electromagnetic pulse effects of ground portions of our national communications and power distribution systems. Many of the DoD's communication needs within the continental United States are supplied through leased commercial telephone service. The redundancy of facilities and interconnections in commercial land line systems is sufficiently great that, despite the lack of specific hardening measures, planners count on a degree of post-attack survivability for basic elements of the network.

Confidence in assured EMP protection for these commercial systems is a major limitation in survivability planning. DNA has been assisting DoD planners in developing technology, program plans, and cost estimates for providing EMP protection to a small portion of these systems to support time-urgent, critical DoD strategic command and control requirements. We are also evaluating alternative systems that may satisfy these requirements in a more cost-effective and maintainable manner. I must stress, however, that these activities deal with only a small portion of the government's total communication needs in the trans- and immediate post-attack period. This is an area, I believe, in which DNA is being particularly responsive to national needs. DNA is investigating the feasibility of developing low cost EMP protection concepts that can be applied to all elements of the national telecommunications systems, and will develop engineering maintenance practices necessary to implement and maintain this protection.

DNA recently has established a new technology data base program on nuclear effects on electronics, combining existing research efforts on transient radiation effects on electronics (TREE) with related EMP and SGEMP activities. The dramatic advances in microelectronics--improvements in signal processing capability, weight and volume reduction, and decreased power consumption--are making military applications increasingly dependent upon this technology. Unfortunately, this trend in microminiaturization also has increased component sensitivity to both natural and nuclear radiation. DNA has demonstrated that a single high-energy neutron, proton, or other cosmic ray can alter electronic memories. We currently are investigating the extent of this problem in a joint program with DARPA. In addition, we are emphasizing the development of hardening technology at the major semiconductor manufacturers to facilitate the availability of hardened parts for military systems designers. An important aspect of this is our support to the new DoD Very High-Speed Integrated Circuits (VHSIC) program in the development of hardening procedures within the VHSIC contractor community.

Theater Nuclear Warfare

It was reported to the Committee last year that theater operational commanders enthusiastically received our program in theater nuclear warfare. This program initially focused on NATO Central Europe in the attempt to improve the U.S./NATO theater nuclear warfare posture. I am pleased to report now that we have expanded our efforts during the past year to other theaters where the spectre of nuclear warfare unfortunately has been reinforced by Soviet and surrogate belligerence. Principal among these are the Western Pacific, Southwest Asia, and the worldwide maritime theater. With respect to European theater nuclear forces, our comprehensive assessments of the nuclear balance continue to provide valuable inputs to the defense force posture planning community. Studies of Soviet and Warsaw Pact strategy, doctrine and force structure have identified vulnerabilities that can be exploited by our theater nuclear forces.

In continuing our support to U.S. and NATO theater nuclear warfare planners, we have recognized the need to develop automated nuclear weapon planning techniques. A significant portion of our research supports the ability to employ nuclear weapons against movable targets. The problems inherent in timely and accurate weapon delivery against such targets demand a near-real time targeting capability. These targeting tools must be able to deal with a range of battlefield situations--from enemy units in contact with friendly forces, to enemy units in the second echelon moving forward from rear assembly areas. The application of the emerging microcomputer technology is providing a new capability to meet this demand. In addition, improved applications of theater nuclear weapons have been identified for a variety of fixed targets, the destruction of which will further degrade, delay, or disrupt the Warsaw Pact forces.

A key issue before the nation and the Congress is modernization of our theater nuclear forces. DNA's force development activities link closely to complementary activities among the Services to ensure that doctrine, tactics, and weapons are optimally designed and deployed to meet the threat, and strike the best compromise for safety, security, and survivability. In so doing, we assure a balanced approach to force modernization efforts by the Services. For example, we are extending our evaluation of the optimum utility of GLCM and manned aircraft for nuclear interdiction of first and second echelon enemy ground forces, and continuing our support for a CNO-sponsored effort to improve Navy posture for maritime theater nuclear warfare.

This year marks another major expansion in DNA's theater nuclear programs. While we continue our European programs as I have described, we are also embarking on a major net assessment of the Pacific Command's theater nuclear balance at the request of the theater Commander through the Joint Chiefs of Staff. PACOM includes a vast area, encompassing over one-half of the earth's surface and 70 percent of its ocean waters. Over the next few years, we will be supporting programs to address nuclear force posture options, improved nuclear weapon planning capabilities, and alternate nuclear doctrine. We anticipate this initial effort in support of the Pacific Command to develop and contribute significantly to our theater nuclear deterrence posture and world stability.

Let me turn now to our Theater Nuclear Force Survivability, Security and Safety (TNFS^3) Program, an activity closely aligned with our theater improvement efforts. The TNFS^3 Program was initiated in 1978 and expanded last year to encompass the broadest possible spectrum of survivability and security issues affecting our theater nuclear forces--survivability from all enemy attack options; security from unauthorized seizures. The TNFS^3 security initiatives impact the US nuclear weapon program worldwide and therefore interact closely with our physical security program. I will address these common initiatives further when I review the physical security program.

TNFS^3 examines every facet of the force-delivery systems, logistics, storage sites, communications, and the nuclear weapons themselves--in order to reduce the vulnerabilities of our theater nuclear forces. Major efforts are underway to improve the survivability of air-delivered nuclear weapons. Testing has begun on a totally new concept for storing weapons in secure vaults inside aircraft shelters. A prototype vault will also be further tested in conjunction with a full-scale explosive test of third-generation hardened aircraft shelters. These two projects have the potential for enormously improving not only survivability but also the security and safety of Air Force theater weapons. Other recent accomplishments include assessing the pre-launch survivability of the ground launched cruise missile, developing improved camouflage concepts for fixed theater storage sites, testing of armored blankets for protecting nuclear weapons against small arms fire, and investigating signature reduction concepts for deployed missile systems.

It is very important to note that all the TNFS^3 projects have been planned and developed in cooperation with the Services and the theater commands. This close-working relationship has been a key factor in the success of the TNFS^3 Program to date.

Physical Security (and Security Portion of TNFS^3): Our physical security research program is closely coordinated with TNFS^3. At the request of the Under Secretary of Defense Research and Engineering (USDRE), DNA manages exploratory development of physical security systems for the DoD. DNA emphasizes the system aspect of security and attempts to provide Services with resources for enhancing the performance of their security forces as well as hardware, facilities, and doctrine. We are an advocate of sound systems integration. We are therefore placing the development of a computerized security system assessment methodology and a nuclear security operational test site at the highest priority.

An excellent example of physical security hardware development (in coordination with TNFS^3) is the igloo deterrent-delay program. In 1974, under physical security exploratory development, DNA and Sandia National Laboratories (SNL) began exploration of concepts to place automated devices inside storage structures to deter and delay forced entry.

At the special request of theater components, DNA, under its TNFS^3 program, is assisting the Army in packaging these deterrent-delay prototype modules for overseas demonstration and testing by NATO.

In the personnel development area, DNA has recently completed a comprehensive human factors review of Army military police performance in nuclear security. We are currently assisting the Air Force Security Police in a parallel effort.

Testing of Air Force doctrinal concepts for the security of field-deployed GLCM is another example of close physical security-TNFS^3 interaction.

Other significant security programs include providing technical assistance to the Corps of Engineers in the installation of sensor systems developing an electronic sensor countermeasure with the State Department, exploring improved design and materials for high security facilities, and developing improved shipboard security hardware. Finally, as stated in the introduction, the DNA physical security program provides support to counterterrorism programs having roles in counter nuclear terrorism and nuclear weapon recovery.

Test Programs

I turn now to DNA's testing activities. Many of our research programs involve experimentation arising from the need to simulate the radiation and blast effects produced by nuclear explosions and to determine the influence of these effects on the performance of military systems. The most significant and still indispensable aspect of our test capability is the underground testing program conducted at the Nevada Test Site (NTS). I am extremely pleased to report that our FY 1982 budget submission for underground testing, as amended, provides for doubling the rate of testing to one test a year, and will permit us to carry out a needed facilities upgrade program at NTS. As part of the DoD Augmented Test Program and our continuing review of underground test requirements, we are proposing to conduct a number of critically important experiments over the next several years. These include system generated EMP phenomenology tests in support of M-X; and, with Air Force concurrence, a major test of the M-X missile; physics experiments to enhance the development of high level X-ray simulators; cratering physics tests; and the development of improved techniques for testing the X-ray response of military systems.

On this high note, I am also pleased to report that two very successful underground tests were conducted within the last year--HURON KING in June, and MINERS IRON at the end of October.

HURON KING, a vertical line-of-sight test, was part of an ongoing DNA program to provide data on the adequacy of theoretical analyses and aboveground test techniques for estimating the hardness of satellites exposed to nuclear radiation. The test was coordinated with the Air Force. This very successful test has improved significantly our data base on nuclear hardening of satellites.

MINERS IRON was a horizontal line-of-sight test. Approximately 2,000 channels of data were obtained in this test. As noted earlier, a final test of the M-X missile structure is planned for September 1982.

It should be noted that the rate of DoD underground nuclear testing has significantly declined in the past few years as a result of budget limitations, the high inflation rate of test site labor and the broad scope of tasking given to DNA. This decrease has also been experienced by the Department of Energy. An Augmented Nuclear Test Program (ATP) provides for an increased rate of testing.

The next major event in our high-explosive testing program will take place next September at White Sands Missile Range. Identified as MILL RACE, this test will simulate the airblast effects from a one-kiloton nuclear surface burst. Recent advances in large-area thermal radiation simulation will be utilized to test for combined airblast and thermal effects on selected experiments. All three Services, as well as the Federal Emergency Management Agency (FEMA) and several foreign countries will field experiments on the MILL RACE test. These include model structures of LoAD radar and interceptor cannister to determine airblast loads, new Army designs for hardened tactical and mobile electronic shelters, a Navy program for new ship superstructure construction, and industrial hardening techniques developed by FEMA. The Strategic Air Command will fly several B-52s as part of their damage assessment strike analysis program. AF-86 drone also will be in flight to measure low-level airblast loads. DNA's next large-scale high-explosive test, DIRECT COURSE, is scheduled for September 1983.

An equally important part of our test program is the development of advanced laboratory radiation simulators. These simulators are necessary to increase our overall nuclear weapons effects testing capability and to lessen our dependence on underground nuclear testing.

My predecessor has reported to you previously on our plans for a Satellite X-Ray Test Facility (SXTF). We have made substantial progress on design of the SXTF this past year, and the facility should be operational in 1984. Development of the X-ray sources was successfully completed in 1980, as was a survey of potential facility sites. We expect to make final site selection early this year.

X-ray sources developed for SXTF presently are being used to test the M-X reentry vehicle, missile piece parts, and small subsystems. We expect that a next-generation, very high power source will be operational in early 1985 which will provide the capability to test larger reentry vehicle and missile components. To attain the high X-ray output eventually required for full-system reentry vehicle testing, we have been exploring the potential of radiation amplification using the inertial confinement fusion concept. We have a formal agreement with the DoE under which DNA provides the pulsed power generator and primary radiation sources, and DoE provides the technology to amplify the radiation output.

As already mentioned, DNA is assisting the Air Force in the development of a testing plan to validate the hardness of the M-X shelter to the effects of source region electromagnetic pulse (SREMP). A late-time SREMP simulator capable of delivering of electrical energy into the major shelter penetrations (power lines and medium frequency antenna) will be procured in FY 1981-82 and readied for field testing in FY 1983.

Our Advanced Research Electromagnetic Simulator (ARES) is capable of high-altitude electromagnetic pulse tests of missiles, small-to-medium size aircraft, and cruise missiles. Tests of nearly all major missile systems such as SPRINT, SPARTAN, MINUTEMAN, POLARIS, and TRIDENT have been carried out in the ARES facility since 1971. Last year, full system tests of the United Kingdom A3TK POLARIS and TRIDENT C-4 missiles were completed. The ARES instrumentation system currently is being upgraded to support M-X missile testing beginning in January 1983.

We are developing a simulator to test satellite system response to communications link disturbances caused by high altitude nuclear weapons bursts. A limited capability simulator will be used to test selected Defense Satellite Communications System components this year, and the full capability simulator will be used on the Integrated Operational Nuclear Detection System (IONDS) in early 1982. These simulators, which are small devices of two to three 19 inch cabinets, will be placed in the radio signal link between the antenna and the receiver.

Biomedical Effects

To this point, I have been describing DNA activities related to military hardware and systems. Our mission also includes the effects of nuclear weapons upon humans. Most of our research on biological effects is done at the Armed Forces Radiobiology Research Institute (AFRRI) in Bethesda, Maryland, which DNA administers. Scientists at AFRRI utilize a variety of approaches to determine the response of cells, tissues, organs, and intact laboratory animals to various levels of ionizing radiation so that the response of man may be estimated.

Past research has focused mainly on early incapacitation of personnel at fairly high doses of ionizing radiation. Recently, we established that the level of radiation affecting performance decreases as the complexity of the task requirements--both mentally and physically--increases. Thus, the military significance of lower levels of exposure is gaining importance, and we will be investigating this area more fully. The AFRRI Board of Governors, which includes the Surgeons General of the Military Departments, recently agreed to assist DNA in updating the medical and operational research requirements for the Institute.

DNA, as the designated Executive Agent for DoD, is continuing Nuclear Test Personnel Review (NTPR). This program, begun in 1978, is to identify all DoD-affiliated participants in the 1945-62 atmospheric nuclear tests, document their involvement, and establish their probable radiation exposures. With the support of the National Academy of Sciences, we are also conducting a survey of the health experience of a large sample--about 40,000--of the estimated 220,000 test participants. The bulk of the dose reconstructions have been completed. About three more years will be required for the health survey and publication of final radiation-health data correlations.

Operation and Maintenance

DNA's O&M funding requirements by program category are furnished in Table III below.

TABLE III
O&M Program
(Dollars in Thousands)

Program Category	FY 1980	FY 1981	FY 1982
Headquarters/Field Command Operations	12,919	12,926	14,663
Nuclear Stockpile Management	3,129	3,514	3,831
Johnston Atoll Operations	9,159	10,937	13,885
Enewetak Base Camp Support	3,109	--	--
Nuc. Wpns Accident Training Exer.	396	2,250	565
Overseas Nuclear Emerg. Search Team	223	581	626
Total O&M	28,935	30,208	33,570

Headquarters/Field Command Operations

This program category provides funds for daily operating expenses at Headquarters DNA in Washington, D.C. and at Field Command in Albuquerque, NM to support the following missions:

-- Management of DoD research programs involving nuclear weapons effects research and testing, and survivability and security of theater nuclear weapons and forces.

-- Provisions of quantitative assessments to the Secretary of Defense, the JCS, the Services, the CINCs, and subordinate commanders concerning the relationship of nuclear weapons effects to nuclear weapons development and to strategic and theater nuclear weapons employment policies.

-- Accomplishment of annual Defense Nuclear Surety Inspections on 20-25% of all Service nuclear-capable units.

-- Provision of management assistance to SecDef, the JCS, and the Services on nuclear weapons security, nuclear weapons safety, establishment of requirements for nuclear weapons.

-- Support to the JCS and OSD on all aspects of the impact of a possible Comprehensive Test Ban Treaty on national security.

-- Development, coordination, and execution of nuclear weapons accident exercises and operations.

-- Coordination of DoD action on all aspects of the health effects of low-level ionizing radiation, including development of a uniform U.S. Government approach to the problems associated with exposures from all sources.

The increase in this program category results from: (1) an increase for the Nuclear Weapons Site Characterizations Program; and (2) other miscellaneous program changes.

Nuclear Stockpile Management

Resources included in this category support DNA's mission to provide consolidated management of all nuclear weapons in DoD's stockpile. This mission, worldwide in scope, requires DNA to maintain overall surveillance--and provide guidance, coordination, and assistance, as appropriate for all nuclear weapons in DoD custody, from completion of production by DOE through retirement. DNA, as the exclusive source of data for the complete stockpile, performs this function by maintaining and operating the national nuclear weapons accounting and reporting system. This system enables DNA to provide timely, accurate, and complete data on each weapon in the stockpile--including serial number, location, application, configuration, and condition--to assure that the status of all DoD nuclear weapons is known at all times.

Johnston Atoll Operations

DNA is charged, in conjuction with DoE, with maintaining an overseas atmospheric nuclear test capability--to include the operation and maintenance of

Johnston Atoll--in accordance with the revised Presidential guidelines for Safeguard C of the Limited Test Ban Treaty. Actual operations and maintenance at Johnston Atoll are performed for DNA by a civilian contractor. Operations financed include normal base support functions, in addition to marine operations and other unique island requirements essential for life support at this remote facility in the Pacific. The increase requested in Fiscal Year 1982 is primarily for a project to repair the runway on Johnston Atoll which is essential for normal day to day operations of the Atoll.

Nuclear Weapons Accident Training Exercise (NUWAX)

Back in April 1979, the first DoD/DoE Nuclear Weapons Accident Exercise (NUWAX-79) was conducted at the DoE Nevada Test Site north of Las Vegas, NV. As a result of NUWAX-79's success and the lessons learned, the ATSD(AE) directed DNA to develop an expanded scope, follow-on exercise (NUWAX-81). NUWAX-81 will include significant involvement with national, state and local emergency response agencies, with emphasis on expanded participation at the Washington level. The scenario simulates a peacetime nuclear weapons accident which poses a radiological threat to life and property. Approximately 560 player/participants and controller/umpire personnel are expected to be involved. A total of $2.3 million was budgeted for all aspects of this important event. Participating agencies include DoE, FEMA, EPA, FAA, the National Laboratories, Military Services, and the California State Office of Emergency Services. The funding decrease in FY 82 represents the difference between an exercise year (FY 81) and a planning year (FY 82).

Overseas Nuclear Emergency Search Team (ONEST)

Last year I discussed the Overseas Nuclear Emergency Search Team. This program has developed smoothly. Today there are 32 neutron and 12 gamma handheld "briefcase" nuclear detectors. During this fiscal year, larger equipment will be produced and deployed. These include a mobile truck mounted detector, ten dual road block monitors and two airborne detector pods capable of being mounted on the US military helicopters. In addition, a five man team of civilian scientist/technicians will provide a permanent incountry training, maintenance and calibration capability. A two man military liaison element (one LTC and one E-7) will also be stationed to assist in managing the project.

Procurement

The procurement funding requirements by program category are furnished in Table IV.

TABLE IV
Procurement Program
(Dollars in Thousands)

	FY 1980	FY 1981	FY 1982
Vehicles	82	194	228
Other Capital Equipment	750	1411	1702
TOTAL PROCUREMENT	832	1605	1930

The DNA Procurement request provides for the replacement of general and special purpose vehicles, material handling equipment and utility mobile equipment used at HQS DNA and DNA installations. Also included are funds to support the procurement of other capital equipment essential to the performance of agency missions.

The fiscal year 1982 budget provides for acquisitions of 31 cargo-carrying and special purpose vehicles and reflects an increase of $34,000 due to a change in quantity and type of vehicles to be purchased.

A major portion of our FY 1982 procurement request is shown under other capital equipment and relates to the planned purchase of a replacement computer at HQS DNA. We have budgeted $1,500,000 to acquire the computer to replace an obsolete piece of equipment and to support the increasing demands for ADP services.

PREPARED STATEMENT OF THEODORE D. WOOD

DIRECTOR

OFFICE OF CIVILIAN HEALTH AND MEDICAL PROGRAM OF THE UNIFORMED SERVICES (OCHAMPUS)

Mr. Chairman and Members of the Subcommittee

I am Theodore D. Wood, Director of the Office of Civilian Health and Medical Program of the Uniformed Services (OCHAMPUS). I am representing the Secretary of Defense in these hearings to discuss the CHAMPUS budget for Fiscal Year 1982. I want to express my appreciation for the opportunity to appear before this Subcommittee.

The CHAMPUS Program provides medical care on a cost-share basis to dependents and survivors of active duty members and retired personnel and their dependents in civilian health facilities. CHAMPUS is administered by the Office of the Assistant Secretary of Defense for Health Affairs through the Office of CHAMPUS, a field activity located in Aurora, Colorado. Beneficiary claims worldwide, with the exception of Europe, are processed by fiscal intermediaries under contract with the Office of CHAMPUS. The European operation is administered by a suboffice in Heidelberg, Germany. The total program projected for FY 1982 is $968.7 million and is composed of two major elements--the reimbursement costs to health care providers for medical supplies and services ($909.5 million) and program operating costs ($59.2 million).

We have included a $10 million increase in the fiscal intermediary administrative costs. This increase is based primarily upon the expanded scope of work now expected of the fiscal intermediary as a result of a major overhaul of contracts including standards of performance. This update of standards has strengthened many of the minimum standards previously required. Additionally, incentives and disincentives have been added to the contract which will provide the fiscal intermediaries with added inducement to exceed contractual minimums, thus enhancing claims processing service to the CHAMPUS beneficiary.

We are requesting an eight percent increase in our administrative cost for the Headquarters in Denver. These funds are necessary for increased ADP support contracts and for the expected inflation of office costs.

Mr. Chairman, 1980-1981 was a year of many accomplishments for OCHAMPUS. Our contractor performance in terms of beneficiary claims processing showed great improvement over previous years. During the August-December 1980, 81 percent of all claims were processed within 21 days by our fiscal intermediaries. This is a 35 percent increase over the same period in 1979. Further, during the same period in 1980, 91 percent of all claims were processed within 30 days as opposed to 73 percent in 1979. These statistics are even more significant when a 12 percent increase in the number of claims processed in 1980 versus 1979 is considered. These statistics are concrete evidence of the significant progress CHAMPUS made in improving claims processing which directly benefits all CHAMPUS users.

CHAMPUS Fiscal Intermediaries have made significant progress in correspondence processing. During August-December 1980, 65 percent of all correspondence received was processed in 10 days. When compared to the same period in 1979 this is a 19 percent increase. It is noted that 78 percent of all correspondence was processed in 15 days in 1980 compared to 63 percent in 1979.

The number of days work on hand for December 1980 was 5.7 days while in December 1979, the number of days work on hand was 10.5 days.

In 1980, we began to modify our procurement plan in such a way as to create seven (7) regionalized contract areas. Regionalizing is expected to simplify contract administration, and at the same time, provide economies of scale to each contractor through an equal distribution of claims volume. As of this date, the South Central Region and Mid-Atlantic Region have been awarded. The remaining regions are expected to be awarded during the next two years.

In an effort to provide the CHAMPUS beneficiary with better service, we have decided to install Toll Free 800 numbers in each of our fiscal intermediaries. These numbers will be available throughout the United States by August 1, 1981, for all beneficiaries to call for inquiries, questions, and complaints about their claims. These toll free numbers are expected to decrease the claims processing time for many claims and to give the beneficiary the satisfaction of dealing with the claims adjudicators directly rather than through the mail. We feel this will help in improving the CHAMPUS/beneficiary relations.

Mr. Chairman, as the Committee is aware, OCHAMPUS entered into contractual arrangements with the American Psychiatric Association and the American Psychological Association to provide professional review of CHAMPUS psychiatric and psychological cases under the CHAMPUS system.

During the first months of operation, 672 cases were subjected to professional review. Of this total 82.4 percent were approved; 1.6 percent were denied mainly for lack of documentation, and 15.9 percent were terminated as inappropriate treatment. These contracts are a success in that the established professional review system is insuring the proper care for beneficiaries by eliminating unqualified and unneeded care; however, we are in the process of reviewing the cost effectiveness of this professional review system which will determine the desirability of continuing this approach to peer review.

OCHAMPUS has completed agreements with the Air Force Finance and Accounting Center at Lowry Air Force Base, Denver, Colorado, and is now receiving all computer support from the Air Force. An additional benefit to these agreements has been that OCHAMPUS had divested itself of all internal computer hardware previously used for support.

OCHAMPUS has begun implementing a Letter-of-Credit system for making contractual payments through the Federal Reserve System. Adoption of this system will reduce administrative procedures previously required while at the same time result in substantial savings in Government interest costs. This new system of financing will be included in new regional contracts and will be fully implemented by all current fiscal intermediaries as contracts are extended.

The DoD was authorized by this Committee to test the concept of using an alternate health care delivery system for CHAMPUS beneficiaries in lieu of the existing reimbursement system. Acting upon this athorization, we have begun establishing the parameters for making this test. We hope to begin implementation of the test in the next three months.

We recognize that there is still room for improvement in the CHAMPUS benefits area. Last year's progress was due to a large degree to this Committee's support of CHAMPUS legislative initiatives which we appreciate.

We have new initiatives and proposals before the Secretary that will come to the Congress if and when approved by the Administration. The continued success in keeping CHAMPUS up-to-date in benefit coverage will depend in large measure upon this Committee's interest and positive action on these new proposals.

A summary of financial requirements by type of expense is attached as Exhibit 1. Exhibit 2 is a summary of personnel requirements.

This completes my statement. I will be pleased to entertain any questions concerning the CHAMPUS Program and the Fiscal Year 1982 Budget Submission.

CIVILIAN HEALTH AND MEDICAL PROGRAM OF THE UNIFORMED SERVICES
SUMMARY OF FINANCIAL REQUIREMENTS
(In thousands of dollars)

Exhibit 1

Type of Expense	FY 1980 Actual	FY 1981			FY 1982	
		President's Budget	Adjustments	Revised Estimate	Increases/ Decreases	Budget Estimate
Civilian Personnel Costs	4,511	5,035	+ 332	5,367	+ 60	5,427
Travel & Transportation of Persons	356	505	+ 23	528	+ 8	536
Transportation of Things	56	89	N/C	89	+ 8	97
Rent, Communication & Utilities	559	825	- 36	789	+ 199	988
Printing and Reproduction	161	703	+ 2,011	2,714	- 1	2,713
Other Purchased Services	705,868	824,679	+ 87,482	912,161	+46,352	958,513
Supplies and Materials	356	229	+ 34	263	+ 50	313
Equipment Purchases	31	35	+ 18	53	+ 24	77
Total (Direct Obligations)	711,898	832,100	+ 89,864	921,964	+46,700	968,664

CIVILIAN HEALTH AND MEDICAL PROGRAM OF THE UNIFORMED SERVICES
SUMMARY OF PERSONNEL REQUIREMENTS

Exhibit 2

	FY 80 Actual	FY 81 President's Budget	FY 81 Adjustments	FY 81 Revised Estimate	FY 82 Budget Estimate
Year End Strength					
Civilian					
U. S. Direct Hire	191	194	- 3	191	191
Foreign National, Indirect Hire	14	14	N/C	14	14
Military	7	4	+ 3	7	7
Totals	212	212	0	212	212
Average Employment					
Civilian					
U. S. Direct Hire	185	194	-17	177	177
Foreign National, Indirect Hire	14	14	N/C	14	14
Military	7	4	+ 3	7	7
Totals	216	212	-14	198	198

PREPARED STATEMENT OF DONALD B. SHYCOFF

DIRECTOR FOR OPERATIONS

OFFICE OF DEPUTY ASSISTANT SECRETARY OF DEFENSE (PROGRAM/BUDGET)
OFFICE OF ASSISTANT SECRETARY OF DEFENSE (COMPTROLLER)

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to appear before your Committee today to discuss the estimated fiscal year 1982 requirements for the appropriation "Claims Defense." This appropriation as prescribed by law, provides the funds required for payments of non-contractual claims against the Department of Defense.

For fiscal year 1982 we are estimating a requirement of $195.5 million. The Congress appropriated $135.9 million for FY 1981. However, based on current trends we have requested an additional $49.0 million in our FY 1981 Supplemental budget request. This will raise the FY 1981 estimate to $184.9 million and will permit the prompt payment of claims as they are adjudicated. We had estimated FY 1982 at $243.5 million on the assumption that a significant number of claims would have to be carried over from FY 1981 to FY 1982. Approval of the FY 1981 Supplemental request will enable us to reduce the FY 1982 request by $48.0 million. Congressional reductions of $15.0 million in FY 1980 and $11.0 million in FY 1981 have restricted our ability to fully fund our requirements in a timely manner. We were able to reprogram $14.7 million in FY 1980 from other appropriations, but the significant increases in both the cost and number of claims makes it essential that our supplemental request be approved.

As you are aware, Claims, Defense is largely an uncontrollable appropriation and it is very difficult to develop precise estimates. The Claims are filed by military personnel and others and results from "acts of nature" and major accidents on the part of our military forces. Reimbursements made in a particular year do not equate precisely to the damages caused in that year. There is a time lag between the cause of the damage and the filing, adjudication and settlement of the claim arising from it. For NATO SOFA claims, there is a further link in the chain. The German agency which has processed and paid a claim submits a reimbursement request to the U.S. Army Claims Service, Europe which then reimbuses the United States share under Article VIII of the NATO SOFA. Therefore, claims can be neither programed in advance nor controlled from year to year. They are adjudicated by properly constituted review authorities and to the extent they are determined payable they must be legally paid. While we can defer nominal amounts of claims from one year to another in order to keep within our obligational authority, it is clear that we are merely pushing our financial problems forward from year to year. Further, it is only equitable that we pay the claim as promptly as possible once it has been adjudicated.

Over the past several years, the Congress has taken exception to the amount in the budget for payment of foreign claims, particularly those in Germany. This reflects a desire that the German Government should pay a larger share of the claims. We believe that the question is much broader than which country pays how much of what claim. The current arrangement is part of the Status of Forces Agreement (SOFA). We cannot change the claims provision of the SOFA without opening up negotiations on the entire SOFA. Unless and until the SOFA is changed, we believe that the United States Government has an obligation to pay these claims when they are properly adjudicated and we believe they are being properly adjudicated.

As I stated earlier, this account is increasing significantly over the budget period as both the cost of claims and the number of claims increase dramatically. A major portion of this increase has been in maneuver damage NATO SOFA reimbursement to the Federal Republic of Germany. There appears to be at least two important reasons for this, (1) increased military activity and (2) adverse economic conditions.

I would like to briefly discuss these points in order to provide a better understanding of the nature of the increased funding requirements. After the end of the war in Viet Nam, there was a replenishing and enhancing of U.S. military presence in Western Europe. The percentage of forces who were combat troops also increased because of the Nunn Amendment. Further, the Army became more mechanized. Our tank, and other tracked vehicles, which are largely responsible for maneuver damages, were also being upgraded and replaced with newer, faster and heavier models.

Because of the larger, more modern force, there was an increased need to conduct maneuvers outside established training areas. These military factors alone would have caused a substantial increase in maneuver damages and accordingly an increase in U.S. reimbursements to Germany. However, over the past few years there were also two major economic factors which combined to exacerbate the situation. The first was the rise in the value of the Deutsche Mark in relation to the dollar. I realize the dollar has been performing better in the past few months, which will help, but must point out the effect of the dollar's decline in the past few years because it is in this period that the claims reimbursement increase seemed so dramatic. The other factor is inflation. Although Germany suffered less from inflation than the U.S.; general inflation in Germany exceeded 13% and in the construction field over 20% during the past few years. This latter figure is particularly significant because about half of the U.S. reimbursement is for road damage.

In summary, the estimates of $184.5 million in FY 1981 and $195.5 million in FY 1982 represents in our judgement a reasonable projection of the requirements for all the types of non-contractural claims against the Department of Defense. As you can appreciate, delaying payments due to a lack of funds results in a hardship to those persons whose claims happen to be adjudicated in the latter part of the fiscal year. These delays and the resultant ill will create a considerable problem for the military services. With our current retention problems this only worsens the military members view of how he or she is treated as a member of the military establishment.

This completes my prepared statement. I will be happy at this time to answer any questions that the Chairmen or members of the Committee may have.

PREPARED STATEMENT OF DAVID O. COOKE

DEPUTY ASSISTANT SECRETARY OF DEFENSE (ADMINISTRATION)

Mr. Chairman and Members of the Committee:

I am pleased to appear again before this committee to present the budget requirements of the Office of the Secretary of Defense, the Washington Headquarters Services, the Organization of the Joint Chiefs of Staff, the American Forces Information Service, the Medical Information Systems, the Department of Defense Dependents Schools program, the Office of Economic Adjustment, and the Defense Audiovisual Agency. If they have not already done so, representatives of other activities included in the Operation and Maintenance, Defense Agencies appropriation will make their individual presentations to you.

The pay, allowances, and permanent change of station costs for military personnel assigned to these activities are not included in the estimates I will address. Such costs are contained in the military personnel appropriation estimates of the Military Departments and will be addressed by their witnesses. These estimates do include, however, all other support costs for military personnel assigned to these activities, such as temporary duty travel, supplies, and office equipment.

Office of the Secretary of Defense

The fiscal year 1982 budget request of $89,812,000 represents an increase of $1,005,000 or 1.1 percent over the current year requirement of $88,807,000 as shown in Attachment 1.

Civilian personnel costs are increasing by $1,973,000 as a result of the following needs: $1,034,000 to fund the merit pay provisions, for GM-13 through GM-15, as authorized by the Civil Service Reform Act of 1978; $87,000 to annualize the 1 October 1980 pay raise and provide overtime pay at the higher rates; and 1,024,000 for an additional 28 work-years of employment needed to provide direction to programs and systems which will be developed in accordance with the present administration's emphasis on improved defense readiness. These increases are partially offset by decreases totaling $172,000 in consultant and terminal leave payments.

Travel and official representational estimates are increased at rates lower than the current rate of inflation thus reflecting an actual decrease in program for both of these items of expense. Funding for studies and analysis and other contractual assistance will also decrease by $1,336,000 from FY1981 levels.

Attachments 1 and 2 summarize the financial and personnel requirements of the Office of the Secretary of Defense.

Washington Headquarters Services

The Washington Headquarters Services (WHS), established in 1977, represents a consolidation of functions which provide a variety of administrative services and operating support to the Office of the Secretary of Defense and certain Defense Agencies and joint activities which do not have internal support capability. For reasons of economy and efficiency, these agencies were not authorized their own support capability at the time of their establishment. Washington Headquarters Services enables support functions to be centralized for maximum efficiency and control. Correspondence control and mail service, records management, directives management, office services, personnel administration, security service, budget and accounting services, and other miscellaneous activities are examples of the administrative services and operational support that WHS provides.

In addition to these traditional types of support, WHS also (1) administers information and data systems in support of the Office of the Secretary of Defense decision and policymaking process. This includes management information collection and reports preparation in the areas of procurement, logistics, manpower, and economics; (2) provides computer services and associated support to the Office of the Secretary of Defense, to include: validation of ADP requirements, management and control of ADP resources, systems development and operation, and the provision of consulting services; and (3) manages DoD-occupied, GSA-controlled administrative space in common support facilities. This includes office space, concessions, layout design, and other related building administration functions.

The Washington Headquarters Services FY1982 budget request of $54,688,000 exceeds the current year program by $4,440,000. Of this amount, 75 percent, or $3,328,000, is price inflation and 25 percent, or $1,112,000, is net program growth. It is important to recognize that the net program growth results primarily from two specific items of expense over which we have no control. In FY1982 we are required to reimburse the Department of Labor for payments made from the Employees' Compensation Fund on our behalf during FY1980. The actual increase due Labor is $885,000. Based on the latest Review, Pieces, and Weight (RPW) Sampling System, it is estimated that we will reimburse the Postal Service $833,000 more in FY1982 than in FY1981. These two significant increases have been consciously offset by net reductions of over $600,000 in other items of expense.

Attachment 3, Summary of Financial Requirements, presents the changes in the WHS program by type of expense.

A summary of personnel requirements is provided as Attachment 4.

Organization of the Joint Chiefs of Staff

Next, Mr. Chairman, I invite your attention to the budget requirements of the Organization of the Joint Chiefs of Staff (OJCS). You will find two charts, Attachments 5 and 6, pertaining to the financial and personnel requirements of that activity.

The FY1982 budget request for this organization is $17,515,000. There is a net increase of $31,000 from the revised FY1981 estimate. Price growth amounted to an increase of $797,000, but this was offset by program decreases in the amount of $766,000.

Net changes by type of expense include the following:

- An increase of $47,000 in travel of personnel is the result of anticipated price increases associated with travel other than per diem.

- An increase of $13,000 in purchase of equipment is the result of price growth necessary to maintain a relatively stable program of equipment replacement.

- A decrease of $13,000 appears in the area of rents, utilities, and communications. Some of the price growth was offset by program reductions in GSA lease costs and a planned reduction in lease of some equipment as lease/purchase options are exercised.

- A decrease of $16,000 in other purchased services is based on minor changes in a variety of purchased service requirements.

American Forces Information Service

The FY1982 budget estimate for the American Forces Information Service (AFIS) is $32,138,000, which represents a net increase of $1,167,000 over the revised FY1981 estimate of $30,971,000. This program is responsible for providing policy and guidance throughout DoD to ensure a free flow of news and information to our military personnel by means of the broadcast and print media. Much of the materials, operations, and services are contracted for with commercial sources.

The funding increase of $1,167,000 reflects increases attributable to price growth of $2,235,000 and a net program decrease of $1,068,000. The price growth is made up of $2,231,000 for inflation and $4,000 in pay raise annualization costs. The net program decrease of $1,068,000 results from program increases in several areas offset by larger decreases in other areas which I will now explain.

Program increases totaling $1,590,000 are planned for the American Forces Radio and Television Service (AFRTS) as follows: $21,000 for increased costs for bulk shipment of printed materials through the Government Printing Office; $81,000 for GSA rent costs beyond price growth factors; $31,000 for contract maintenance for the AFRTS Programing Center (AFRTS-PC) in Los Angeles; $34,000 for supplemental funding to support increased costs for purchasing and printing paper stock; $529,000 for increased funding for the acquisition of broadcast materials and contractor costs associated with radio/television program duplication and distribution; $726,000 for other supplies to include videotape and shipping containers; and $168,000 for additional equipment items included in this O&M Appropriation request due to the new higher FY1982 threshold ($3,000) for Other Procurement Appropriation items.

The program decreases are made up of: $417,000 from a personnel ceiling reduction and from permanent change of station costs required in prior years; a $6,000 reduction in travel costs; $4,000 less in local training requirements; and a $2,231,000 decrease due to a lessening of large start-up costs for the AFRTS Satellite Network (SATNET) budgeted in prior years. This last item is based on known earth station locations identified by the American Forces Information Services. There are also slight cost reductions in the use of land line communication circuits.

Attachments 7 and 8 pertain to the budget of the American Forces Information Service.

Medical Information Systems

The FY1982 Medical Information Systems (MIS) budget request of $46,921,000 represents an increase of $8,746,000 over the current year revised estimate. MIS includes two major activities: 1) support to the Assistant Secretary of Defense (Health Affairs), including the Defense Enrollment/Eligibility Reporting System (DEERS), Uniform Chart of Accounts (UCA), and the Data Management Information System (DMIS); and 2) the Tri-Service Medical Information Systems (TRIMIS). These systems are designed to centralize and standardize the development and implementation of medical information and management systems to enhance the effectiveness and economy of health care delivery within the Department of Defense.

A major portion of the $8,746,000 increase is needed to support or provide emphasis to programs as directed by Congress; i.e. $2,000,000 for the Defense Enrollment/Eligibility Reporting System and $2,800,000 for acquisition of a Hospital Information System. The remaining $4,198,000 will provide for the installation and operation of 23 additional TRIMIS systems. This includes site preparation, communications, rental and maintenance of Automatic Data Processing Equipment (ADPE), and maintenance of software.

Attachments 9 and 10 summarize the financial and personnel requirements of the MIS budget activity.

Department of Defense Dependents Schools

The budget request of the Department of Defense Dependents Schools (DoDDS) program for FY1982 is in the amount of $426,981,000, an increase of $32,138,000 over the FY1981 funding of $394,843,000. Of this increase, $36,430,000 represents inflation and $2,017,000 represents program growth. A funding decrease of $6,309,000 is due to foreign currency adjustments.

These funds will provide for the continuation of the educational programs conducted in FY1981 and provide for increased costs of the programs, such as teacher salary increases, educational and logistical support costs, tuition-fee schools, transportation, and costs unique to operating overseas dependents schools. The request also provides for program improvements for special education, remedial reading programs, pupil assessment, and vocational education. Resources are also included to implement a 2-year phased student meal program by funding for minor construction of facilities and for purchase of kitchen and serving equipment.

The request for FY1982 continues current year programs and provides for the implementation of the Five Year Curriculum Review cycling sequence initiated by DoDDS in FY1975. The implementation requires the purchase of materials identified in pilot studies which have been directed by this office and conducted in our schools. The request continues the implementation of the provisions of Title XIV, Dependents Education Act, 1978, which requires the Department of Defense to provide programs of high quality in special, vocational, and compensatory education. Resources are provided to establish a new salary lane (B+15) for overseas teachers.

Office of Economic Adjustment

The cost for operation and maintenance of the Office of Economic Adjustment (OEA) for FY1982 will amount to $2,402,000. This office has been assisting communities impacted by Defense changes since 1961 and, since 1970, has served as the permanent staff of the President's Economic Adjustment Committee (EAC) (18 Federal agencies, chaired by the Secretary of Defense). In March 1978, the President issued Executive Order 12049 to strengthen the Committee and assure that coordinated Federal assistance is timely and responsive to serious needs of Defense-impacted communities.

Over the past decade there has been steadily increasing Congressional concern about the possible impact of major Defense changes on local communities. In response, the Military Departments have been preparing more extensive and detailed social and economic assessments of alternative program change proposals. These developments have, in turn, increased local and state awareness of possible impacts and increased the need for OEA planning assistance. For example, OEA has continued to assist the Air Force with studies and support to identify and plan for mitigation of social and economic impacts of the M-X missile program. This assistance rendered in cooperation with concerned local, state, and Federal agency officials is intended to help fulfill Defense objectives without creating an unfair burden on local communities. Similar assistance is provided to the Navy in support of its Trident East program in Georgia and Florida. The Army has been assisted at the National Training Center at Fort Irwin and at Fort Stewart. (A comprehensive study of Community Impact Assistance is being prepared for delivery to the Congress during FY1981.)

The FY1982 request of $2,402,000 represents a $322,000 increase over the FY1981 budget. Of this amount, $245,000 is an increase in costs attributed to expansion of economic adjustment work in localities where there is a growth in military activities. The remaining net increase of $77,000 is attributable to inflation costs for the various support items included in this budget.

Attachments 13 and 14 summarize the financial and personnel requirements of the Office of Economic Adjustment.

Defense Audiovisual Agency

The Defense Audiovisual Agency (DAVA) was established by the Deputy Secretary of Defense (DoD Directive 5040.1) on June 12, 1979. The Assistant Secretary of Defense (Public Affairs) is charged with overall policy development and oversight responsibility for DoD audiovisual activities. DAVA has DoD-wide responsibility for audiovisual reproduction, acquisition, distribution, and depository activities as well as certain other audiovisual operations which can be performed most effectively and efficiently on a centralized basis. The Military Departments and other Defense components retain responsibility for those specialized audiovisual activities which are integral to the performance of operational missions or those audiovisual activities which can be performed more efficiently or effectively, such as service unique or base level audiovisual support. The ceiling spaces, personnel funds, and equipment to perform the mission functions of the Agency were provided from within resource levels approved for the Military Departments.

The organization of the DAVA consists of a headquarters and several field activities. The headquarters is located at Norton Air Force Base, California, where it occupies the space formerly occupied by Headquarters, Aerospace Audiovisual Service.

In establishing the Agency, the Deputy Secretary of Defense charged the Director to implement a 10-15 percent ceiling reduction from the start-up authorization within 24 months from the date on which the Agency becomes fully operational. As part of this effort, a comparative cost analysis will be performed at field activities to allow for conversion to appropriate contract support arrangements where cost effective. The Agency manpower program as of the end of FY1984 reflects a 15 percent reduction from start-up mission manpower levels. The reduction is planned to take place over the 2-year period FY1983-1984.

	FY1981	FY1982
Civilian End Strength	543	543
Military End Strength	136	136

The direct program of $17,036,000 for FY1982 represents an increase of $2,090,000. Of this, $485,000 is due to price inflation including $218,000 for annualization of the FY1981 pay raise. The remaining $1,387,000 is program increases of which $1,150,000 is due to three program transfers from other Defense Departments: $400,000 for 15 civilian spaces obtained from the Air Force in a switch for 15 military spaces; $400,000 for a mission transferred from the Army to provide distribution of Skill and Performance Aids (SPA); and $350,000 for data processing support previously provided to DAVA by the American Forces Information Service. The remaining $455,000 in program increases is to provide contract and other support in the area of mass duplication of audiovisual productions (motion pictures, video or audio tapes and disks, slides, and combined audiovisual media). This increase is necessary to allow DAVA to meet scheduled due dates for production of audiovisual products in support of the Military Departments training programs.

OFFICE OF THE SECRETARY OF DEFENSE
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 1

Type of Expense	FY1980 Actual	FY1981			FY1982	
		President's Budget	Adjustment	Revised Estimate	Increases/ Decreases	Budget Estimate
Civilian Personnel Costs	44,212	47,771	+3,320	50,805	+1,973	52,778
Travel of Personnel	2,501	3,100	+264	3,650	+347	3,997
Transportation of Things	-	-	-	-	-	-
Rents, Utilities, and Communications	-	-	-	-	-	-
Printing and Reproduction	-	-	-	-	-	-
Other Purchased Services						
Contracts	15,098	37,479	-3,506	33,973	-1,336	32,637
Other	298	350	+29	379	+21	400
Supplies and Materials	-	-	-	-	-	-
Equipment	-	-	-	-	-	-
Total (Direct Obligations)	62,109	88,700	+107	88,807	+1,005	89,812

OFFICE OF THE SECRETARY OF DEFENSE
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 2

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustments	Revised Estimate	
Year End Strength					
Civilian					
Full Time	1,094	1,193	+26	1,219	1,219
Other	129	17	+33	50	50
Subtotal-Civilian	1,223	1,210	+59	1,269	1,269
Military	432	401	+10	411	411
Total-Year End	1,655	1,611	+69	1,680	1,680
Average Employment					
Civilian					
Full Time	1,094	1,169	+22	1,191	1,219
Other	100	31	+18	49	49
Subtotal-Civilian	1,194	1,200	+40	1,240	1,268
Military	405	401	+10	411	411
Total-Average Employment	1,599	1,601	+50	1,651	1,679

WASHINGTON HEADQUARTERS SERVICES
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 3

Type of Expense	FY1980 Actual	FY1981 President's Budget	FY1981 Adjustment	FY1981 Revised Estimate	FY1982 Increases/ Decreases	FY1982 Budget Estimate
Civilian Personnel Costs	7,606	18,478	+2,168	20,646	+200	20,846
Travel of Personnel	218	270	-	270	-6	264
Transportation of Things	69	46	-	46	+4	50
Rents, Utilities, and Communications	8,071	10,131	-	10,131	+1,512	11,643
Printing and Reproduction	2,570	3,100	-	3,100	+17	3,117
Other Purchased Services	(12,774)	(15,010)	(-758)	(14,252)	(+2,544)	(16,796)
Contracts	164	-	-	-	-	-
Other	12,610	15,010	-758	14,252	+2,544	16,796
Supplies and Materials	717	900	-	900	-34	866
Equipment	467	903	-	903	+203	1,106
Total (Direct Obligations)	32,492	48,838	+1,410	50,248	+4,440	54,688

WASHINGTON HEADQUARTERS SERVICES
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 4

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustments	Revised Estimate	
Year End Strength					
Civilian					
Full Time	273	328	+21	349	349
Other	53	61	-5	56	56
Subtotal-Civilian	326	389	+16	405	405
Military	94	89	-2	87	87
Total-Year End	420	478	+14	492	492
Average Employment					
Civilian					
Full Time	273	328	+14	342	349
Other	53	61	-5	56	56
Subtotal-Civilian	326	389	+9	398	405
Military	94	89	-2	87	87
Total-Average Employment	420	478	+7	485	492

ORGANIZATION OF THE JOINT CHIEFS OF STAFF
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 5

Type of Expense	FY1980 Actual	FY1981			FY1982	
		President's Budget	Adjustment	Revised Estimate	Increases/ Decreases	Budget Estimate
Civilian Personnel Costs	6,963	6,883	+497	7,380	-	7,380
Travel of Personnel	919	1,525	+165	1,690	+47	1,737
Transportation of Things	2	1	+1	2	-	2
Rents, Utilities, and Communications	4,001	6,027	-45	5,982	-13	5,969
Printing and Reproduction	202	130	+93	223	-	223
Other Purchased Services	729	1,351	+139	1,490	-16	1,474
Contracts	(-)	(-)	(+25)	(25)	(+75)	(100)
Other	(729)	(1,351)	(+114)	(1,465)	(-91)	(1,374)
Supplies and Materials	476	456	+114	570	-	570
Equipment	124	197	-50	147	+13	160
Total (Direct Obligations)	13,416	16,570	+914	17,484	+31	17,515

ORGANIZATION OF THE JOINT CHIEFS OF STAFF
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 6

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustments	Revised Estimate	
Year End Strength					
Civilian					
Full Time	261	274	+7	281	281
Other	13	7	-	7	7
Subtotal-Civilian	274	281	+7	288	288
Military	1,017	1,023	+17	1,040	1,049
Total-Year End	1,291	1,304	+24	1,328	1,337
Average Employment					
Civilian					
Full Time	261	277	-3	274	274
Other	14	8	-	8	8
Subtotal Civilian	275	285	-3	282	282
Military	1,017	1,023	+17	1,040	1,049
Total-Average Employment	1,292	1,308	+14	1,322	1,331

AMERICAN FORCES INFORMATION SERVICE
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 7

Type of Expense	FY1980 Actual	FY1981 President's Budget	FY1981 Adjustment	FY1981 Revised Estimate	FY1982 Increases/ Decreases	FY1982 Budget Estimate
Civilian Personnel Costs	3,727	4,749		4,749	- 364	4,385
Travel of Personnel	172	232	- 3	229	+ 15	244
Transportation of Things	28	51		51	+ 26	77
Rents, Utilities, and Communications	6,233	11,774		11,774	- 777	10,997
Printing and Reproduction	1,664	1,766		1,766	+ 384	2,150
Other Purchased Services						
Contracts	8,016	10,220	-194	10,026	+1,518	11,544
Other	1,414	217		217	+ 49	266
Supplies and Materials	1,460	2,020		2,020	+ 135	2,155
Equipment	67	139		139	+ 181	320
Total (Direct Obligations)	22,781	31,168	-197	30,971	+1,167	32,138

AMERICAN FORCES INFORMATION SERVICE
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 8

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustment	Revised Estimate	
Year End Strength					
Civilian					
Full Time	131	131	-	131	131
Other					
Subtotal-Civilian	131	131	-	131	131
Military	43	50	-	50	50
Total-Year End	174	181	-	181	181
Average Employment					
Civilian					
Full Time	131	131	-	131	131
Other					
Subtotal-Civilian	131	131	-	131	131
Military	43	50	-	50	50
Total-Average Employment	174	181	-	181	181

MEDICAL INFORMATION SYSTEMS
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 9

Type of Expense	FY1980 Actual	FY1981 President's Budget	FY1981 Adjustment	FY1981 Revised Estimate	1982 Increases/ Decreases	1982 Budget Estimate
Civilian Personnel Costs	511	866	-63	803	+63	866
Travel of Personnel	85	200	-9	191	+53	244
Transportation of Things	1	1	-	1	-	1
Rents, Utilities, and Communications	155	155	-	155	-	155
Printing and Reproduction	15	15	-15	-	-	-
Other Purchased Services	(26,099)	(36,923)	(+62)	(36,985)	(+8,630)	(45,615)
Contracts	19,252	18,390	+252	18,642	+10,289	28,931
Other	6,847	18,533	-190	18,343	-1,659	16,684
Supplies and Materials	33	35	-	35	-	35
Equipment	2	5	-	5	-	5
Total (Direct Obligations)	26,901	38,200	-25	38,175	+8,746	46,921

MEDICAL INFORMATION SYSTEMS
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 10

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustments	Revised Estimate	
Year End Strength					
Civilian					
Full Time	27	27	-	27	27
Other	-	-	-	-	-
Subtotal-Civilian	27	27	-	27	27
Military	23	23	-	23	23
Total-Year End	50	50	-	50	50
Average Employment					
Civilian					
Full Time	17	27	-2	25	27
Other	-	-	-	-	-
Subtotal-Civilian	17	27	-2	25	27
Military	23	23	-	23	23
Total-Average Employment	40	50	-2	48	50

DEPARTMENT OF DEFENSE DEPENDENTS SCHOOLS
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 11

		FY 1981			FY 1982	
Type of Expense	FY 1980 Actual	President's Budget	Adjustment	Revised Estimate	Increases/ Decreases	Budget Estimate
Civilian Personnel Costs	210,269	229,778	+ 10,271	240,049	+ 30,878	270,927
Travel of Personnel	7,515	9,827	+ 425	10,252	+ 55,002	65,254
Transportation of Things	9,731	8,271	+ 508	8,779	+ 5,186	13,965
Rents, Utilities, and Communications	19,085	17,796	+ 8,535	26,331	- 4,841	21,490
Printing and Reproduction						
Other Purchased Services						
Contracts	52,229	57,942	+ 2,908	60,850	- 54,834	6,016
Other	19,393	21,810	+ 1,521	23,331	+ 19	23,350
Supplies and Materials	15,315	20,380	+ 2,940	23,320	- 1,958	21,362
Equipment	5,309	3,496	- 1,565	1,931	+ 2,686	4,617
Total (Direct Obligations)	338,846	369,300	+ 25,543	394,843	+ 32,138	426,981

DEPARTMENT OF DEFENSE DEPENDENTS SCHOOLS
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 12

	FY 1980 Actual	FY 1981 President's Budget	FY 1981 Adjustments	FY 1981 Revised Estimate	FY 1982 Budget Estimate
Year End Strength					
Civilian					
Full Time	8,812	10,142	- 265	9,877	10,396
Other	780	780	+ 265	1,045	1,045
Subtotal-Civilian	9,592	10,922	-	10,922	11,441
Military					
Total-Year End	9,592	10,922	-	10,922	11,441
Average Employment					
Civilian					
Full Time	9,789	10,240	+ 21	10,261	10,230
Other	780	780	- 16	764	850
Subtotal-Civilian	10,569	11,020	+ 5	11,025	11,080
Military					
Total-Average Employment	10,569	11,020	+ 5	11,025	11,080

OFFICE OF ECONOMIC ADJUSTMENT
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 13

Type of Expense	FY1980 Actual	FY1981			FY1982	
		President's Budget	Adjustment	Revised Estimate	Increases/ Decreases	Budget Estimate
Civilian Personnel Costs	968	1,124	+16	1,140	-11	1,129
Travel of Personnel	61	93	+1	94	+8	102
Transportation of Things						
Rents, Utilities and Communications	55	116	-10	106	-9	97
Printing and Reproduction		50	-15	35	-10	25
Other Purchased Services	(763)	(912)	(-218)	(694)	(+348)	(1,046)
Contracts	750	885	-208	677	+349	1,026
Other	13	27	-10	17	-1	16
Supplies and Materials		8	-	8	-4	4
Equipment	1	4	-1	3	-	3
Total (Direct Obligations)	1,848	2,307	-227	2,080	+322	2,402

OFFICE OF ECONOMIC ADJUSTMENT
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 14

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustments	Revised Estimate	
Year End Strength					
Civilian					
Full Time	29	30	-3	27	27
Other	-	-	+2	2	2
Subtotal-Civilian	29	30	-1	29	29
Military	3	3	-	3	3
Total-Year End	32	33	-1	32	32
Average Employment					
Civilian					
Full Time	29	30	-3	27	27
Other	-	-	+2	2	2
Subtotal-Civilian	29	30	-1	29	29
Military	3	3	-	3	3
Total-Average Employment	32	33	-1	32	32

HQ DEFENSE AUDIOVISUAL AGENCY
SUMMARY OF FINANCIAL REQUIREMENTS
(In Thousands of Dollars)

Attachment 15

Type of Expense	FY1980 Actual	FY1981			FY1982	
		President's Budget	Adjustment	Revised Estimate	Increases/ Decreases	Budget Estimate
Civilian Personnel Costs	-	9,615	2,106	11,721	1,018	12,739
Travel of Personnel	-	300	-4	296	16	312
Transportation of Things	-	250	-150	100	-50	50
Rents, Utilities, and Communications						
Printing and Reproduction	-	-	129	129	2	131
Other Purchased Services						
Contracts	-	3,003	-1,909	1,094	745	1,839
Other						
Supplies and Materials	-	997	550	1,547	351	1,898
Equipment	-	35	24	59	8	67
Total (Direct Obligations)	-	14,200	746	14,946	2,090	17,036

DEFENSE AUDIOVISUAL AGENCY
SUMMARY OF PERSONNEL REQUIREMENTS

Attachment 16

	FY1980 Actual	FY1981			FY1982 Budget Estimate
		President's Budget	Adjustments	Revised Estimate	
Year End Strength					
Civilian					
Full Time	16	522	-	543	543
Other					
Subtotal-Civilian	16	522	-	543	543
Military	7	156	-	136	136
Total-Year End	23	678	-	679	679
Average Employment					
Civilian					
Full Time	7	511	-	532	532
Other					
Subtotal-Civilian	7	511	-	532	532
Military	3	156	-	156	156
Total-Average Employment	10	667	-	688	688

PREPARED STATEMENT ON "RETIRED PAY, DEFENSE"

The appropriation requested is a consolidation of the estimates of the military services for retired pay of military personnel on the retired lists of the Army, Navy, Marine Corps and Air Force, retainer pay for members of the Inactive Fleet Reserve of the Navy and Marine Corps, and payments to retired military personnel under the Retired Serviceman's Family Protection Plan (RSFPP) and the Survivor Benefit Plan (SBP).

The amended appropriation request for FY 1982 is $15,748.2 million, compared with $13,887.8 million appropriated in FY 1981. The amount requested for FY 1982 will provide for payments to an average of 1.4 million retirees and their survivors, an increase of 44,300 over the estimate for FY 1981.

The method enacted in Public Law 94-440 (October 1, 1976) for cost-of-living adjustments makes semi-annual increases effective on March 1 and September 1 of each year, based on the percentage change of the Consumer Price Index (CPI) for the six-month period ending December 31 and June 30 of each year, respectively. The current and budget year estimates include costs associated with anticipated increases in retired pay for the following CPI-related adjustments: 4.4 percent March 1, 1981; 5.8 percent September 1, 1981; 4.1 percent March 1, 1982; and 4.3 percent September 1, 1982.

Not reflected herein, but provided for as a legislative contingency in the Department of Defense budget, is a proposal to limit CPI adjustments to one each year. Savings of $67.5 million in FY 1981 and $380.2 million in FY 1982 would result from enactment of this proposal. The Retired Pay, Defense appropriation does not reflect these reduced costs since the appropriation estimates are based on current law. However, the savings included in the legislative contingency are reflected as a reduction to the Defense totals.

The basic appropriation request for FY 1982 is $1,860.4 million above the FY 1981 estimate. The primary increase is related to the CPI adjustments ($1,417.2 million). The following table shows the individual changes:

	($ in Million)
FY 1981 Revised Estimate	13,887.8
Average Strength/Rate Change	+427.6
Survivor Benefit Legislation	+15.6
Annualization of March 1981 CPI Adjustment	+246.6
Annualization of September 1981 CPI Adjustment	+746.9
March 1982 CPI Adjustment	+366.5
September 1982 CPI Adjustment	+57.2
FY 1982 Basic Appropriation Request	15,748.2

SUMMARY

The amounts included for each of the categories are based on computations of averages of the rates payable or expected to be payable applied to the best available projections of the number of personnel to be carried on the rolls in Fiscal Years 1981 and 1982.

Payments under this appopriation are required by law and any funds not required revert to the Treasury at the end of the fiscal year.

MAJOR CATEGORIES OF PERSONNEL

General

There are five major categories of personnel who will receive payments from this appropriation.

Nondisability

The nondisability category includes personnel who are retired for age or length of service (to include Title III personnel who gain eligibility on the basis of points credited and whose retired pay is deferred to age 60).

It is estimated that $12,772.6 million or 81.11 percent of the total appropriation request will be required to provide for an average of 1,059,626 retirees in the nondisability category in FY 1982.

Temporary Disability

The temporary disability category is an interim classification for disabled personnel where there is some doubt as to the degree or permanence of their disability.

It is estimated that $77.3 million or 0.49 percent of the total appropriation request will be required to provide for an average of 9,123 temporarily disabled retired military personnel in FY 1982.

Permanent Disability

The permanent disability category is composed of military personnel whose disability has been definitely determined to be permanent. Persons may be placed on the permanent disability rolls immediately following the termination of their active duty or by transfer from the temporary disability rolls.

It is estimated that $1,492.9 million or 9.48 percent of the total appropriation request will be required in FY 1981 for an average of 138,618 permanently disabled retired military personnel.

Fleet Reserve

The Fleet Reserve is composed of Navy and Marine Corps enlisted personnel having 20 but less than 30 years of service who elect to transfer from active duty to the Fleet Reserve. Upon completion of 30 days of combined active service and service in the Fleet Reserve or upon being found physically unfit for further military service, such personnel are transferred to the regular retired rolls.

It is estimated that $1,018.0 million or 6.46 percent of the appropriation request will be required in FY 1981 to provide for an average of 105,605 Fleet Reservists.

Survivors' Benefits

The survivors' benefits category includes those survivors of active duty and retired military personnel who are entitled to payments under this appropriation.

It is estimated that $387.4 million or 2.46 percent of the total appropriation request will be required to provide for an average of 77,928 survivor annuitants in FY 1982.

BUDGET AUTHORITY, TOTAL OBLIGATIONS, UNOBLIGATED BALANCE AND AVERAGE NUMBER OF FISCAL YEAR

(In Thousands of Dollars)

Fiscal Year	Budget Authority	Total Obligations	Unobligated Balance	Average Number 5/
1952	345,000	330,598	14,402	137,785
1953	357,000	356,385	615	147,216
1954	387,000	386,298	702	162,305
1955	423,500	422,102	1,398	174,012
1956	495,000	478,932	16,068	185,754
1957	515,000	510,784	4,216	192,209
1958	567,000	560,962	6,038	208,570
1959	640,000	634,542	5,458	222,545
1960	715,000	692,922	22,078	242,904
1961	789,500	787,806	1,694	275,914
1962	920,000	895,854	24,146	313,436
1963	1,029,000 1/	1,014,755	10,925	358,830
1964	1,228,000	1,211,215	16,785	410,853
1965	1,399,000	1,385,578	13,422	462,453
1966	1,600,000	1,592,352	7,648	508,566
1967	1,839,000	1,831,159	7,841	564,280
1968	2,095,000	2,093,478	1,522	624,496
1969	2,450,000	2,422,941	7,059	691,688
1970	2,859,000 2/	2,853,234	4,766	750,144
1971	3,391,032	3,388,999	2,033	806,139
1972	3,921,446 3/	3,889,115	12,331	867,190
1973	4,441,684	4,392,218	49,466	923,788
1974	5,150,700	5,136,897	13,803	983,788
1975	6,250,900	6,238,511	12,389	1,049,553
1976	7,325,600	7,300,052	25,548	1,109,357
19TQ	1,968,248 4/	1,946,132	22,116	1,144,717
1977	8,238,100	8,218,698	19,402	1,175,019
1978	9,179,600	9,173,164	6,436	1,219,844
1979	10,283,000	10,282,049	951	1,262,951
1980	11,964,700	11,919,617	45,083	1,306,247
1981 6/	-	13,887,800	-	1,346,600
1982 6/	-	15,748,200	-	1,390,900

1/ $3.3 million transferred to "Claims, Defense."

2/ $1.0 million transferred to "Operation and Maintenance, Defense Agencies."

3/ $20.0 million transferred to "Operation and Maintenance, Air Force."

4/ Includes $1,942,700 appropriated plus $25,548 apportioned in FY 1976 but unobligated on June 30, 1976, which is automatically apportioned for use during FY 19TQ.

5/ Includes those receiving Survivors' Benefits.

6/ Estimates for FYs 1981-1982 are based on CPI adjustments expected to be in effect through FY 1981 and FY 1982.

PREPARED STATEMENT ON SPECIAL FOREIGN CURRENCY PROGRAM

Mr. Chairman and Members of the Committee:

I am appearing before this Committee to discuss the Department of Defense Special Foreign Currency Program. This program was established for Government agencies to promote the use of excess foreign currencies which are available for U.S. use. Under the language of this appropriation, the dollars appropriated may be used only to purchase from the Treasury currencies needed to finance undertakings which can be carried out with these excess currencies.

There are two principal points in connection with this appropriation which distinguish it from all other Defense appropriations:

1. First, the currencies spent under this program are already owned by the U.S. Treasury. Consequently, there are no net U.S. Government dollar outlays for transactions carried out under the program. While budget authority shows up as a part of DoD Budget authority, obligations, and outlays, there is no net outlay from the U.S. Treasury.

2. Second, our regulations require that projects must be clearly in the national interest; they must not involve excessive dollar costs and only minimal balance of payments outlays; and the projects cannot cover items which have been specifically denied by Congress in other appropriation or authorization requests or be above levels beyond specific congressional recommendations. For research, the criteria also limit undertakings to those which take advantage of (a) special geographical, environmental or cultural conditions, fauna or flora; (b) diseases, epidemiological situations, or availability of clinical material; or (c) unique research ideas highly relevant to the Department of Defense.

In addition, it is required that each DoD component obtain clearance from the State Department to assure that the proposed undertakings are consistent with the foreign policy of the United States.

Our budget request is made up of undertakings that have been proposed by the Military Departments. These proposals are reviewed during the course of the annual budget review to assure their adherence to the criteria for this program. These are then consolidated into a single appropriation request for inclusion in the President's Budget.

Let me point out that the opportunities for the Department of Defense to use this program are quite limited. Normally, the countries whose currencies are on the excess list are not countries in which there is a significant defense involvement.

The total request for FY 1982 is $3.1 million for research undertakings in Pakistan and India.

The research undertakings in Pakistan are for biological research-related studies.

The research undertakings in India are related primarily to marine These research. These undertakings are to support the activities conducted by the Office of Naval Research.

We consider that all of the undertakings selected for this program are in fields where the research efforts will be responsive to the needs of the Defense program. Moreover, we consider that these are undertakings which are appropriate to conduct in excess foreign currency countries.

This completes my statement. I will attempt to answer any questions the Committee may have concerning this program.

PREPARED STATEMENT OF JAY P. SANFORD, M.D.

DEAN, SCHOOL OF MEDICINE

UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES

Mr. Chairman, Members of the Committee, I greatly appreciate the opportunity to present the budget requests for the Uniformed Services University of the Health Sciences for Fiscal Year 1982.

At the onset, I am pleased to inform the Committee that during the current year, two significant milestones in the School's mission of providing highly qualified medical officers for the military and Public Health Service will have been achieved. This May, the University will graduate its second class with the awarding of Doctor of Medicine degrees to 67 medical students. In August the University will take another step toward achieving its designed capacity by matriculating an incoming class size of 156 instead of the current 130.

The ability to rapidly establish a medical education program of recognized quality is due in large measure to strong, constant Congressional support. Speaking for myself, as well as for David Packard, who serves as Chairman of the University's Board of Regents and its acting President, I wish to express special gratitude to this Committee for its continuing interest and confidence in this program and for the assistance which has been provided.

The University budget requests are commensurate with the growth in student enrollment. The request for Operation and Maintenance funds in FY 1982 is for $25,602,000. This increase of $3.0 million over the FY 1981 budget will be used primarily for personnel compensation and benefits to the additional faculty and staff employed to support the larger student load.

Approval of $1,149,000 in procurement funds is requested for the purpose of purchasing additional student laboratory and other teaching equipment, necessitated by increased class sizes, and by the need for improvement in departmental laboratory equipment and replacement of obsolete items.

The $1,650,000 requested in FY 1982 for Research, Development, Test and Evaluation will permit the continuation of present programs and the establishment of a small number of new programs for improvement in military health care, infectious diseases and their control, combat casualty care, hazard protection, and health care research. All of the University's programs are reviewed regularly by the Office of the Under Secretary of Defense for Research and Engineering and coordinated with the Military Departments. Scientific merit is evaluated in relation to other research programs in and out of the Department of Defense. Reviews also eliminate the possibility of undesirable duplication.

The continuing academic accreditation of the University requires the maintenance of a strong research program. The research program permits faculty members to remain current with the advances in scientific knowledge and to engage in productive research in their area of expertise. The program supports medical education by the development of a spirit of inquiry in the students, and fosters their effective harnessing of this spirit through the utilization of the scientific method.

To provide a viable research program, there must be a reliable source of funding. Civilian medical schools rely upon support from state and local governments and from private contributions for core research money. Because the Uniformed Services University does not have access to such state and local funds and does not wish to solicit from private sources due to the potential for conflict of interest, sole reliance is placed on Congressional funding to provide the "seed" money to initiate programs, and to maintain a minimum level of support.

The University's RDT&E program represents 5.8 percent of the 1982 budget, considerably lower than that of other high quality medical schools, all of which have major research commitments. However, this level of effort is consistent with our major goal, the development of a quality educational program in which the research effort is complementary to the educational mission. To maintain a quality faculty, especially one which remains concerned with the problems of military medicine, these RDT&E funds are essential. The programs supported by these funds are of military relevance and link the students and faculty directly with problems in military medicine.

Those of us associated with the Uniformed Services University are proud of past accomplishments and excited about the future. The graduation of the second class is most satisfying and significant because: quantitatively, it marks the School's growing contribution in meeting the health care needs of our Nation's uniformed services; and qualitatatively, these men and women will have been uniquely trained as military physicians.

I would be pleased to respond to any questions or comments from the Committee.

Thank you.

PREPARED STATEMENT OF HON. ROBINSON O. EVERETT

CHIEF JUDGE

U.S. COURT OF MILITARY APPEALS

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to present to you the Appropriation Request of the United States Court of Military Appeals for Fiscal Year 1982. This, of course, is my first opportunity to appear before you in this connection since I only assumed office on April 16, 1980.

For FY 82 the Court's appropriation request is $2.607 million. The request for funding at this level is designed to maintain the Court's current programs. The only increase over the Fiscal Year 1981 **appropriated** level is to support the cost of additional reimbursement to GSA for rental of the Courthouse as well as the costs associated with equipment maintenance on the Court's word processing and data processing system.

The Court has not yet reached its projected staffing level of 49 and, consistent with the Administration's efforts to minimize government expenditures, we will endeavor not to increase our staff to that level unless this becomes absolutely essential because of a substantial increase in our caseload.

In this connection I should note that we anticipate such an increase as a result of the increasing courts-martial rate in the various Armed Services throughout the world. For example, the Air Force experienced a 31% increase in general and special courts-martial during CY 80 alone. The Navy and Marine Corps experienced a 56% increase during the same time period. Such activity apparently represents a policy choice by military leaders as to the extent to which military justice should be utilized as a leadership and management tool. The Navy, for instance, has recruited 175 additional lawyers to permit additional prosecutions, especially in unauthorized absence cases. In addition, the Courts of Military Review, from which we derive most of our cases, already have experienced a substantial upsurge in their caseloads -- up 68% in the Air Force, 53% in the

Navy, and 18% in the Army, over the 1979 experiences in these courts. Indeed, the Air Force found it necessary to increase the membership on its Court of Military Review from five to eight judges. The number of cases filed in this Court will inevitably follow these trends.

There is a somewhat greater lead time before the increase of cases at lower levels in the military justice system filters up to our Court. This is especially true since I am informed that at the Court of Military Review level there presently exist some rather substantial backlogs. Of course, our Court is under special time constraints because of the provision in Article 67 of the Uniform Code of Military Justice, 10 U.S.C. 867, which requires that any petition for review submitted by an accused be acted upon within 30 days. Currently, some 85 - 95% of the petitions for review are denied. However, before denial, the Court makes a thorough and independent review of the record.

This is especially facilitated by the efforts of an able and experienced central legal staff which prepares a memorandum on the petition for review and outlines the arguments presented as well as the pertinent case law. I doubt that any other appellate court having discretionary jurisdiction makes a more detailed review of the record to insure that no prejudicial error has been committed. Over the years the Court of Military Appeals has considered this part of our statutory duties.

During the last session of Congress, two bills were pending in the House of Representatives which proposed an increase in the number of judgeships on the Court from three to five. Although one of the bills received approval in the House of Representatives, it was not enacted by the Senate. Thus, for the foreseeable future, there still will be only three judges to dispose of the extensive caseload handled by the Court of Military Appeals. Because of the shortage of judicial manpower, it has been especially important to develop an effective central legal staff to assist in the processing of petitions and to develop an automated word processing and data processing capability which will enable the Court's personnel to function with maximum efficiency. Currently, we have in operation a sophisticated computer which meets not only the Court's word processing needs but also functions as a data base management system to monitor pending cases. Indeed, administrators from various other courts and from numerous government agencies, law firms, and private organizations have visited the Court to learn about the automated management information system which has been developed and is presently in use here.

From the statistics available to us as to caseload in other courts of last resort and per judge caseloads, we believe that the Court of Military Appeals remains quite cost effective. Actually, it is rather difficult to make meaningful comparisons in cost effectiveness because so much depends on the complexity of the average case being disposed of. Moreover, since we are dealing with a specific field of law - although an increasingly complicated field - inevitably some efficiencies would develop.

As members of the Court view it, one of our responsibilities is to travel out to various parts of the military community. We feel that our jurisprudence must be responsive to the needs of that community and since American armed forces are spread around the world, we have believed it necessary to travel to different parts of the world. For example, in the fall I went to visit American installations in Korea, Japan, Okinawa and the Philippines. Although it was a very hurried trip, I found it quite meaningful in terms of better appreciating some of the operational problems which must be taken into account in administering the military justice system. Judge Fletcher will be making a somewhat similar trip in the near future.

Also, all the members of the Court have considered it important to participate actively in projects designed to improve the professional legal education of military lawyers and to make service personnel and the public generally aware of the safeguards provided by the Uniform Code of Military Justice and by the Court's decisions interpreting the Code.

Still another responsibility is that imposed under Article 67(g), which directs that the judges of the Court of Military Appeals along with the Judge Advocates General annually inform the Congress of the status of military justice. We take this responsibility quite seriously and consider that it signifies that we must from time to time leave Washington and go out into the field to learn what is really happening at the trial level.

Our budget estimate for FY 1982 does not reflect substantial increases projected in the costs associated with procurement of legal periodicals, legal reference books, legal reporters, supplies, equipment, travel, training, and virtually every other item which is subject to inflationary pressure. In FY 1982, as in past years, we plan to absorb such increases by curtailing the least essential programs that we have underway or by utilizing new technology and cross-training of employees to enhance our ability to perform our duties with the facilities at hand. One of the main tasks during Fiscal Year 1981 has been the elimination of a backlog which resulted from a seven month period during which there were only two judges on the Court. During that time many issues had to be left unresolved because these two judges could not reach a consensus. Before FY 1981 is over, this problem should be completely behind us. However, as I have indicated earlier, it probably will be replaced by the new problem of a greater caseload resulting from increased court-martial activity. Also, because of the adoption of the Military Rules of Evidence, which took effect on September 1, 1980, and which are modeled on the Federal Rules of Evidence, many new evidentiary issues will be faced for the first time by our Court as well as the Courts of Military Review.

Among the difficult tasks which we already have confronted are defining the scope of military jurisdiction in connection with off-post drug offenses, balancing the serviceperson's right to privacy against the military commander's power to order a search, delineating the permissible scope of pretrial interrogation, and clarifying what evidence may be used in connection with sentencing by a court-martial.

I appreciate this opportunity to present the Court's budget estimate and trust that my comments have provided you some insight into the problems facing the Court. Also provided for your information are the Court's FY 80 and first quarter FY 81 statistics, which should be instructive as to the progress which we have achieved. I shall be pleased to answer any other questions the Committee might have.

USCMA STATISTICAL REPORT

Fiscal Year 1980

CUMULATIVE SUMMARY

CUMULATIVE BEGINNING PENDING	
Master Docket	202
Petition Docket	299
Miscellaneous Docket	6
TOTAL	507

CUMULATIVE FILINGS	
Certificates filed	34
Petitions for grant filed	1,725
Petitions for new trial filed	1
Extraordinary writs sought	47
Reconsiderations granted	5
TOTAL	1,812

CUMULATIVE TERMINATIONS	
Master Docket	195
Petition Docket	1,364
Miscellaneous Docket	50
TOTAL	1,609

CUMULATIVE END PENDING	
Master Docket	387
Petition Docket	320
Miscellaneous Docket	3
TOTAL	710

OPINION SUMMARY

CATEGORY	SIGNED	PER CURIAM	MEM/ORDER	TOTAL
Master Docket	60	17	118	195
Petition Docket	0	0	1,364	1,364
Misc. Docket	1	0	49	50
TOTAL	61	17	1,530	1,609

USCMA STATISTICAL REPORT

Fiscal Year 1980

FILINGS (MASTER DOCKET)

Appeals filed	0
Certificates filed	34
Petitions granted	337
Reconsideration granted	5
TOTAL	376

TERMINATIONS (MASTER DOCKET)

Findings & sentence affirmed	134		
Reversed in whole or in part	39	Signed	60
Granted petitions vacated	16	Per curiam	17
Other disposition directed	6	Mem/order	118
TOTAL	195	TOTAL	195

PENDING (MASTER DOCKET)

Assigned opinions pending	193
Judges' conference pending	15
Oral argument pending	60
Preargument conference pending	23
Calendar committee pending	75
Final briefs pending	21
TOTAL	387

FILINGS (PETITION DOCKET)

Petitions for grant of review filed	1,717
Petitions for grant/new trial filed	1
Cross-petitions for grant filed	8
TOTAL	1,726

TERMINATIONS (PETITION DOCKET)

Petitions for grant dismissed	7		
Petitions for grant denied	1,340	Signed	0
Petitions for grant remanded	15	Per curiam	0
Petitions for grant withdrawn	2	Mem/order	1,364
TOTAL	1,364	TOTAL	1,364

PENDING (PETITION DOCKET)

Petition briefs pending	187
Staff attorney action pending	96
Court action pending	37
TOTAL	320

USCMA STATISTICAL REPORT

Fiscal Year 1980

FILINGS (MISCELLANEOUS DOCKET)	
Writs of error coram nobis sought	3
Writs of habeas corpus sought	14
Writs of mandamus/prohibition sought	19
Other extraordinary relief sought	11
TOTAL	47

TERMINATIONS (MISCELLANEOUS DOCKET)	
Petitions withdrawn	3
Petitions remanded	0
Petitions granted	1
Petitions denied	36
Petitions dismissed	10
TOTAL	50

Signed	1
Per curiam	0
Mem/order	49
TOTAL	50

PENDING (MISCELLANEOUS DOCKET)	
Briefs pending	0
Action by Writs Counsel pending	0
Show cause action by Court pending	0
Show cause response pending	0
Other final action pending	3
TOTAL	3

RECONSIDERATIONS & REHEARINGS

CATEGORY	FILINGS	PENDING	DISPOSITIONS		
			Granted	Rejected	TOTAL
Master Docket	15	0	5	5	10
Petition Docket	16	4	2	5	7
Miscellaneous Docket	0	0	0	0	0
TOTAL	31	4	7	10	17

MOTIONS ACTIVITY

CATEGORY	FILINGS	PENDING	DISPOSITIONS		
			Granted	Rejected	TOTAL
All Motions	728	36	551	123	674

USCMA STATISTICAL REPORT

First Quarter FY 81

CUMULATIVE SUMMARY

CUMULATIVE BEGINNING PENDING	
Master Docket	387
Petition Docket	320
Miscellaneous Docket	3
TOTAL	710

CUMULATIVE FILINGS	
Certificates filed	4
Petitions for grant filed	451
Petitions for new trial filed	0
Extraordinary writs sought	6
Reconsiderations granted	0
TOTAL	461

CUMULATIVE TERMINATIONS	
Master Docket	218
Petition Docket	377
Miscellaneous Docket	5
TOTAL	600

CUMULATIVE END PENDING	
Master Docket	199
Petition Docket	377
Miscellaneous Docket	5
TOTAL	581

OPINION SUMMARY

CATEGORY	SIGNED	PER CURIAM	MEM/ORDER	TOTAL
Master Docket	18	8	192	218
Petition Docket	0	0	377	377
Misc. Docket	0	0	5	5
TOTAL	18	8	574	600

SUBCOMMITTEE RECESS

Senator **Rudman**. The subcommittee is going to stand in recess until the call of the Chair.

[Whereupon at 12 p.m., Tuesday, July 7, the subcommittee was recessed to reconvene at the call of the Chair.]

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

WEDNESDAY, OCTOBER 28, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 9 a.m., in room 1223, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senators Stevens, McClure, Andrews, Kasten, and Hollings.

CENTRAL INTELLIGENCE AGENCY

SOVIET DEFENSE ASSESSMENT

The subcommittee heard the classified testimony of Rae M. Huffstutler, Director, Office of Soviet Analysis, Central Intelligence Agency.

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 1982

WEDNESDAY, OCTOBER 28, 1981

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D.C.

The subcommittee met at 10:10 a.m., in room 1318, Everett McKinley Dirksen Senate Office Building, Hon. Ted Stevens (chairman) presiding.

Present: Senator Stevens, Andrews, and Hollings.

DEPARTMENT OF DEFENSE

SECRETARY OF DEFENSE

STATEMENT OF HON. CASPAR W. WEINBERGER, SECRETARY OF DEFENSE

ACCOMPANIED BY:
GENERAL DAVID C. JONES, CHAIRMAN, JOINT CHIEFS OF STAFF
DR. JACK BORSTING, COMPTROLLER

STRATEGIC DEFENSE PROGRAMS

Senator STEVENS. Good morning, Mr. Secretary, General Jones, and Dr. Borsting.

The subcommittee will now proceed to the public portion of its hearings on the President's strategic defense programs. We just completed a brief hearing to take testimony from Central Intelligence Agency witnesses on the defense capabilities of the Soviet Union. We are now prepared to hear the Secretary of Defense and the Chairman of the Joint Chiefs of Staff present an overview of the strategic program.

Based on the limited information supplied to the committee to date, we are looking at a strategic program cost in fiscal year 1982 of $21.5 billion. This is about $2 billion less than the March budget figure for strategic programs, due largely to savings in the MX and Trident programs.

PROGRAMS COST SUMMARY

Most of the specific cost information we now have is classified and cannot be printed in the public record. Accordingly, the committee will ask the Department to prepare an unclassified summary of the program costs we will be discussing today, including a comparison of the March and September budget estimates. The summary should identify funding by program and appropriation account for fiscal year 1982 and, where not classifed, an outyear funding associated with it. And that will be printed in the record of this point.

[The information follows:]

SUMMARY TABLES ON FUNDING BY PROGRAM

Table 1 summarizes changes in strategic program funding between the March budget submission and the October estimate, which reflects the President's strategic program.

Table 2 details these changes by program and by appropriation.

Table 1

FY 1982 Funding for Strategic Programs
(TOA in FYDP $ Billions)*

	March 1981 Amended Budget	Program Changes	Oct 1981 Budget
ICBMs			
Titan	.1	-.02	.1
Minuteman	.5	-.08	.4
MX	2.9	-.96	2.0
Other	.5	-	.5
ICBM Total	4.0	-1.06	3.0
SLBMs			
Trident Submarine	1.4	-.96	.4
Trident Msls (C4/D5)	1.2	-	1.2
Operations & Other	2.8	-.01	2.8
SLBM Total	5.3	-.97	4.3
BOMBERS			
B-1B/ATB	2.5	-	2.5
B-52	2.4	-.10	2.3
FB-111	.1	-	.1
SRAM	.1	-	.1
ALCM	.8	-	.8
KC-135	1.5	-	1.5
Other	.9	-	.9
Bomber Total	8.1	-.10	8.0
STRATEGIC DEFENSE			
Air Surveillance	.6	-	.6
Interceptor Ops.	.4	-	.4
F-15s	1.3	-.04	1.3
BMD	.6	+.05	.6
Space Defense	.3	-	.3
Other	.7	-	.7
Strategic Defense Total	3.9	+.02	3.9
STRATEGIC C^3			
Missile Warning	.7	-	.7
Command Centers	.4	-	.4
Communications	.9	+.07	1.0
Other	.1	-	.1
Strategic C^3 Total	2.1	+.07	2.2
TOTAL	23.5	-2.04	21.5

*Columns may not add due to rounding.

Table 2

CHANGES TO FY 1982 STRATEGIC PROGRAMS [a]

		TOA in FYDP $ M
MX		-965.0
Basing (RDT&E, Air Force)	(-403.0)	
Basing (Military Construction, AF)	(-492.0)	
Fuze/RES (RDT&E, Air Force)	(-70.0)	
ALCS Phase III		-31.1
Aircraft Mods (Aircraft Procurement, AF)	(-10.6)	
Mods (Missile Procurement, AF)	(- 1.7)	
Development (RDT&E, AF)	(-18.8)	
MESP (Missile Procurement, AF)		-45.0
TITAN Mods (Missile Procurement, AF)		-20.0
TRIDENT		-970.8
10th TRIDENT (SCN)	(-960.8)	
Support (O&M, Navy)	(-10.0)	
B-52D		-101.4
Mods/Spares (Aircraft Procurement, AF)	(-82.5)	
Operations (O&M, Air Force)	(-18.9)	
F-15 (Aircraft Procurement, AF)		-35.0
Ballistic Missile Defense (RDT&E, Army)		+52.0
Strategic C^3		+72.4
FLTSATCOM (Weapons Procurement, Navy)	(+65.0)	
EHF SATCOM (RDT&E, Navy)	(+24.5)	
EC-135 Replacement A/C (APAF)	(+20.4)	
RESC (RDT&E, Defense Agencies)	(-37.5)	
TOTAL		-2043.9

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[a] Changes relative to March 1981 amended budget submission (as of October 9, 1981)

HEARING PROCEDURE

Mr. Secretary, General Jones, Dr. Borsting, as I said, we welcome you before the committee. I am sorry that there is a scheduled markup of the full committee on another bill which is almost prepared to go to the floor. There may be other Senators who will be able to come here from that meeting.

I am delighted that my good friend, the Senator from South Carolina, has joined us now.

Your remarks, Mr. Secretary, will be printed in the record in full. We will ask you to highlight your statement if you will. I might add that should the hearing require, in the opinion of the committee, going into closed session, we will consider that at that time, but at the present time this hearing is not to be interpreted to require any answers that would touch classified information. Thank you.

Secretary **Weinberger**. Thank you very much, Mr. Chairman and Senators. We appreciate very much the opportunity to be with you. I will try to summarize and highlight this statement since you do have it before you. Some of the answers to your questions may indeed require classified material and we will try to advise you at that point and either submit answers to them in writing or handle them however else you would wish.

ACTIVITIES FOR UPGRADING STRATEGIC PROGRAMS

Basically, what we are talking about this morning and what we are going to try to summarize this morning is the President's program for revitalizing, strengthening, and modernizing the strategic programs. The programs are very large and very expensive and they will spread over a 6- to 7-year period. That is made necessary by reason of the fact that all parts of the Triad are very much in need of modernization and strengthening now.

BOMBER FORCE

The current bombers which would have to penetrate into the Soviet air space, if needed, are aging bombers. As you know, the cliche is that they are older than the people who fly them and they do not have the capabilities that they need for penetrating through improving Soviet air defenses.

GROUND-BASED MISSILE SYSTEM

The ground-based missile system is vulnerable and aging and is not as accurate as it should be, and the same is true of the submarine-launched missiles that we have.

STRATEGIC DEFENSE IMPROVEMENT

We have also the need to improve—very dramatically—our strategic defenses which we have not done and we have—most of all—the critical necessity of improving the command, control and communication systems that enable us to operate the whole system.

So, basically, those are the things that face the President. It is something that we can argue and probably would have been better done if it had been started earlier and spread over a longer time span. On the other hand, it does present an opportunity to complete and modernize a total system and while the length of time—over eight years—that it takes to bring it on is frustrating in many ways, it is essential that we begin.

We have presented the program to you and it will require, overall about $180 billion in fiscal 1982 dollars. As you mentioned at the start, the cost for this year's program will come out in the neighborhood of $21.5 billion or in that general range.

I should add, Mr. Chairman, that what we have here at this point are orders of magnitude figures that present an overall total so that the President would be able to make his decision with the knowledge of how this would fit in, in a general way with the other programs of the Government and with other Defense programs over that period of time.

We have made every effort and have succeeded thus far, in holding the strategic programs that we are outlining this morning to a total of less than 15 percent of total Defense budget. That is the total Defense budget over the 5- or 6-year period being covered by this program.

CONVENTIONAL FORCE STRENGTHENING

We think that is an appropriate balance because as we have mentioned many times before, a conventional war would now be a great deal more likely to last longer than had previously been planned and, therefore, the conventional forces also need strengthening as this time.

Again, I should add at the beginning, as I have said so many times, that if we are completely successful in everything that we do and in preparing for all possibilities, we will never have to use any of the things we are asking you to buy this morning.

FIVE POINT OUTLINE OF PROGRAM

I will quickly outline the five points of the program. First, there is the communications and control system improvements for about $18 billion. With that we propose to improve and operate our strategic communications and control system.

This includes funds to begin upgrading our strategic warning capabilities, filling in gaps in the early warning lines, deploying airborne command posts, hardening the existing airborne command posts against nuclear effects and improving their communications and providing a new satellite communication system with as great a degree of surviability as we can.

As you know, for the modernization of the bomber forces, we have recommended that we go ahead with the development and procurement of the B-1B variant, a modified version if the earlier B-1B that was actually first put into the budget in 1970 and, at that time was projected to be on the line in 1977.

It was, however, canceled and now we feel it is essential that we have this addition, or this supplement to the B-52's to enable us to continue penetrating Soviet air space while we bring the advanced technology bomber on line, as we hope, in the 1990's.

The B-1 aircraft is an aircraft that is already developed; it is understood, and it does not make extensive use of new materials or techniques. Therefore we have a high degree of confidence that their initial operational capability will be in 1986. We are developing a number of specific and detailed estimates, all of which we will have in much better shape when we get estimates from the subcontractors under the prime.

We also will have, as always with this situation, a number of different things which might or might not be added or could or could not be deleted from the various plans and designs that we are talking about now. So, there are a lot of preliminary data floating about. These are referred to as tentative estimates because someone may yet have to include something that was not considered previously.

COST OVERRUNS

They are talking about cost overruns and we have not even signed a contract yet. You do have a number of things that have to be done even in a program where there has been as much work already done as in the B-1. The important thing is the general overall order of magnitude figure and that fits into the $180 billion that we are talking about for the full strategic program. That overall figure will not be changed.

The advanced technology bomber will be on line in the early 1990's. It does involve new things, new materials and new techniques. For that reason we do not have the degree of confidence that we can have in the B-1, where we already have four prototypes constructed and flying.

CRUISE MISSILES

In addition, we will deploy over 3,000 cruise missiles starting in the next few years on the B-52's, and other platforms giving us an near-term additional strategic capability, a capability that we need as quickly as possible.

That, of course, is one of the problems underlying the whole strategic program. As we see it, given the momentum on the Soviet side of the things they have ordered earlier as well as the lack of momentum on our side, the most difficult, dangerous part of the decade is the middle years. We need to make sure that a gap does not open or, if it cannot be avoided, that it be quickly closed.

That is why we believe we need the cruise missiles, because that is something we can start deploying now. Regarding our sea-based strategic capability, the new D-5 missile that we are talking about will have a much improved hard target capability. It is a missile with much greater accuracy and greater payload to range.

That gives the submarines a higher degree of flexibility in the areas in which they can operate and it approximately doubles the payload of the predecessor missile.

MX MISSILE

The MX missile, which of course has been the most controversial part of the program, is a very essential addition to our capabilities.

The Minutemen and Titans are now not nearly as accurate as they should be. They do not have as many warheads as we are now capable of deploying and they do not have either the survivability or the accuracy we require.

The MX missile will begin to come on line in the 1985 to 1986 period. We know that that is the kind of missile that we need. What we will probably do with the missile is to deploy it initially—under the President's recommended program—in reconstructed and hardened silos now used by the Titans which will be decommissioned and deactivated or in reconstructed minuteman silos.

We will not go ahead with the MPS system, but we will examine three very promising options starting immediately and make a final deployment decision no later than 1984. We do not lose time by doing this because even if we had gone ahead with the MPS system, the 200 MX's and the 4,600 shelters, we would not have been able to have that fully deployed until 1989.

We plan to put the MX in greatly hardened silos. By this means we gain extra time. It is an interim solution, but we will have that additional strength while we are pursuing R. & D. on a more survivable mode.

UPGRADING OF STRATEGIC DEFENSE

Finally, our strategic defense, which we have neglected for a long time, must be upgraded. There are large gaps in the North American defense network. We do not have the air defense interceptors that we need. The ones that we have are obsolete. We need to continue our antisatellite and ballistic missile defense programs where our R. & D. is now starting to fall behind.

We are going to improve our radars, deploy Over-the-Horizon Backscatter radars, and we are also going to start examining ways in which we can improve our civil defense.

Mr. Chairman, that is a very brief summary of the matters that we have put before you in the statement. I will be glad to try to take your questions as will General Jones and Jack Borsting, our comptroller.

[The statement follows:]

PREPARED STATEMENT OF HON. CASPAR W. WEINBERGER

SECRETARY OF DEFENSE

Mr. Chairman and Members of the Committee:

I am pleased to have this opportunity to speak to you today about the Reagan Administration's program for reversing the serious decline of U.S. strategic capabilities and rebuilding a strong, stable, nuclear deterrent. I can hardly overstate the importance of prompt action to revitalize our strategic forces. Half-hearted measures will not give us the credible strategic posture which is the key to preventing any Soviet nuclear attack against us or our allies. Strong U.S. strategic forces are also absolutely essential to securing any genuine arms reduction agreement with the Soviet Union. Already, past U.S. indecision in the face of long-term Soviet efforts to modernize and greatly expand their strategic forces has shifted momentum in their favor. We cannot continue to temporize.

The strategic program proposed by the President meets this challenge fully. We will redress the most serious weaknesses in our present position by modernizing our forces and improving communications and control systems. We must have survivable, reliable means of detecting a nuclear attack, of communicating with and controlling our retaliatory forces, and of directing a retaliatory thrust of such force that no Soviet leaders would ever dare to initiate nuclear war.

To accomplish these goals, we propose a comprehensive strategic program. Before discussing details of these recommendations further, I want to stress that this program is affordable. It will require about $180 billion, in FY 1982 dollars, during the period FY 1982 to FY 1987 to improve and operate our strategic forces. This comes out to about $222 billion in dollars adjusted to reflect anticipated inflation, and fits within the President's fiscal guidelines. The strategic program will comprise less than 15 percent of the overall Defense program over the next six years. This contrasts, for example, with the over 20 percent of the Defense budget devoted to strategic programs during the strategic buildup in the Kennedy Administration. In no way will this program slow our efforts to revitalize our conventional and theater nuclear forces. We are actively pursuing substantial, long-term improvements in all areas of U.S. military capability; the state of the world makes it imperative that we do so.

The Five Mutually Reinforcing Elements of the Reagan Strategic Program

The President's program consists of five mutually reinforcing elements guaranteeing that each part of the triad will be as strong and survivable as possible:

- -- First, improvements in command and control systems;
- -- Second, modernization of strategic manned bombers and unmanned cruise missiles so we retain the capability to penetrate Soviet air defenses by manned bombers;
- -- Third, deployment of new submarine-launched missiles, in many ways the most survivable of all systems;
- -- Fourth, a step-by-step plan to improve the strength and accuracy of new land-based missiles and to reduce their vulnerability; and
- -- Fifth, improvement in strategic defenses as a fourth means of discouraging and deterring attack.

Communications and Control Systems

One of our most urgent tasks is to ensure that we can obtain timely warning of a nuclear attack so that the President can respond appropriately. We must also improve the survivability of our communications and control systems so that we retain the ability to employ our forces under any circumstances.

The approximately $18 billion effort we propose to improve and operate our strategic communications and control systems over the next six years includes $2.1 billion in FY 1982 to commence upgrading our strategic warning capability, to deploy E-4B airborne command posts, to harden existing EC-135 airborne command posts against nuclear effects and improve their communications, to develop a new satellite communications system, and to provide better communications for our bombers and submarines.

Bomber Forces

The previous Administration was willing to live with the risks of an aging B-52 force for the 1980s, and the uncertain schedule and unproven capabilities of an advanced technology bomber (ATB or "Stealth") for the 1990s. We are not. Instead, we have chosen a far less risky course in a field where the margin for error is exceedingly small. Our program will provide much-needed capability in the 1980s and will respond to the Congressional mandate to field a new bomber by 1987. We will also produce, as soon as possible, an advanced technology bomber needed to give us significant advantages into the next century. In total, it will cost about $63 billion in FY 1982 dollars to improve and operate our bomber force over the next six years.

Specifically, we will field a force of 100 B-1B bombers, with an initial operating capability in 1986. The revised Defense budget includes $2.4 billion in FY 1982 for further development work and for procurement of two aircraft. The previous B-1 design will be altered to make the new B-1B an even more capable strategic weapons system. The B-1B will also have an important conventional attack role for many years to come.

The ATB program will lead to initial deployment, under current plans, in the early 1990s. This "two bomber" approach will not only provide capability when needed but also will help in controlling costs by stimulating competition, allowing for flexible procurement policies, and providing the B-1B for use as a cruise missile carrier for the 1990s -- instead of another, yet-to-be-developed aircraft.

Beginning next year, we will deploy over 3,000 cruise missiles in B-52Gs and Hs, as well as B-1Bs when they become available. Existing tanker aircraft will be outfitted with new engines to support the bomber fleet. Finally, we will retire the older B-52Ds, thus saving $62.0 million in FY 1982 and about $1.5 billion by FY 1987.

Sea-Based Strategic Capability

Approximately $42 billion will be required in FY 1982 and the next five years to strengthen and operate the sea-based portion of the triad. A more accurate and powerful weapon, the D-5 or TRIDENT II missile, will be developed. Full scale procurement will commence in FY 1987, although we will be requesting advance procurement funds before that date.

This missile nearly doubles the payload of its predecessor, and will enable us to maintain our sea-based capabilities when POSEIDON submarines must be deactivated in the 1990s. TRIDENT submarines will be constructed at the steady, efficient rate of one per year. Our FY 1982 request has been revised, as you know, to delete $960.8 million for full funding of the tenth TRIDENT submarine while adding advance procurement funds to support the revised construction schedule.

Much worry has been expressed, and correctly, about our strategic posture in the middle of this decade. The acquisition of many cruise missiles, which can be accomplished more quickly than any other form of effective deterrent, can do much to reduce the danger. Therefore, we will deploy several hundred nuclear-armed, sea-launched cruise missiles on our general purpose submarines beginning in 1984. These missiles will serve to strengthen our deterrent by enhancing our Strategic Reserve Force. Let me emphasize, however, that these sea-launched cruise missiles are no substitute for the ground-launched cruise missiles and the PERSHING II ballistic missiles in Europe; they serve different purposes and have different capabilities.

Land-Based Missile Forces

As the President has directed, we are cancelling the so-called multiple protective shelter (MPS) basing schemes for the MX missile. Even at its completion, this large-scale plan of the previous Administration for soft shelters would be as vulnerable as MINUTEMAN is today should the Soviets increase their warhead inventories, which they are entirely capable of doing. The MPS systems, as previously proposed, would not be survivable against the near term threat, let alone the likely one of the late 1980s.

We will continue development of the MX missile, procuring 100 operational missiles and providing for an initial deployment of a limited number -- up to fifty -- in Titan or Minuteman III silos, reconstructed to provide more hardness to nuclear effects. We are talking about a hardening to withstand up to 5,000 pounds of over pressure. As I have already announced, all Titan missiles will be deactivated. Deploying the MX in reconstructed silos gives us an interim improvement in our existing ICBM force. The MX missile is a stronger and more accurate weapon that breaks the Soviet monopoly on prompt counter-ICBM capability at the earliest possible date. Our revised budget includes $2.0 billion in FY 1982 for MX, principally for research and development work. Funding for procurement and construction will be required starting in FY 1983, in addition to the FY 1981 design money previously deferred but made available again by the President's basing mode decision.

Meanwhile, we will pursue vigorous R&D on programs to give us survivable MX basing for a much longer period. These include continuous patrol aircraft, ballistic missile defense and deep underground basing. We expect to choose the most promising option or options for continued effort in 1984, leading to initial deployment around the end of this decade. In total, we propose spending about $34 billion to improve and operate our land-based ICBM forces over the next six years.

Strategic Defense

Finally, I will summarize our program for upgrading U.S. strategic defensive systems. These forces and sensors have been virtually ignored for over a decade; as a result, we have large gaps in the North American air defense network, air defense interceptors that are obsolete and costly to operate, and anti-satellite and ballistic missile defense R&D programs that have fallen behind the Soviets.

Our program is multi-faceted. It will improve air surveillance, in coordination with Canada, by deploying a combination of new, long range, all altitude Over-The-Horizon Backscatter (OTH-B) radars and improved versions of existing radars. Development efforts toward more enduring air surveillance sensors will be started. We will replace five squadrons of aging F-106 interceptors with F-15s and buy at least six more AWACS aircraft for peacetime and wartime surveillance and interceptor control. We will continue to pursue an operational anti-satellite system and conduct research on ballistic missile defenses. Finally, an expanded but cost-effective civil defense program will be developed in coordination with the Federal Emergency Management Agency. Operation of our existing systems and improvement efforts will require approximately $3.6 billion in FY 1982, and about $23 billion over the next six years.

Conclusion

Mr. Chairman, these proposals will mold strategic forces which will furnish a strong, reliable, credible nuclear deterrent shield for the United States and our Allies. I believe this program to be the most comprehensive, innovative, and effective effort possible, which is only fitting, given the grave importance of these matters.

Mr. Chairman, this concludes my remarks. I would be happy to take any questions you or the Committee members might have.

B-1 BOMBER

Senator STEVENS. Thank you very much, Mr. Secretary. As I indicated, your statement has been printed in full in the record and their will be two parts to this, the classified and unclassified portion of our record. I think the best thing to do would be to go directly to the B-1 bomber decision.

The final decision that was made by Congress, to my memory, was in 1977 when that was canceled. If it had not been canceled in 1977, when would it have been on the line?

Secretary WEINBERGER. I have to go back in history a little bit. When I was running the budget, I put the funds for it in 1970. It then had an IOC of 1977. So, it should have been ready then. There were one or two design changes subsequent to that time.

My memory is that it would have been ready and deployed in 1978 or 1979. General Jones probably has more specific information about its history.

Senator STEVENS. My memory was that Senator Proxmire's amendment that was added in the bill in 1976 gave the President the right to veto the further deployment of the B-1 in 1977 and that is what happened, the President did veto it. Is that right, General?

General JONES. The President decided against it and the Congress did not override his decision which they could have done with regard to the 1977 budget. The initial B-1 capability would have been this year for one squadron. Its initial operational capability as defined at that time would have been 1982. We would have had one squadron operational this year based on the program at that time.

There had been some slippage and the Secretary is right, that earlier we could have achieved the 1977 or 1978 date. But at the time of the cancellation it was to have been an 1981-82 timeframe program.

Senator STEVENS. What was the cost of the bomber then?

General JONES. We had at that time a program that would be about $24 billion. That is my best recollection for the 244 aircraft buy.

Senator STEVENS. In my memory, we were dealing with the high-flying supersonic new type aircraft at that time and that is not what we are dealing with now, is that right?

General JONES. Yes, sir. At that time, we had an option of flying supersonic. Our basic plan was to fly low altitude subsonic even though we would have had a supersonic capability in penetration. The basic mode would have been low-altitude subsonic penetration.

Senator STEVENS. Does the B-1 being suggested now have supersonic capability?

General JONES. You can go supersonic just like many other aircraft if you wish to. That is not planned, though, because of the increased fuel consumption that would be required to go supersonic. The plan now is to make the basic penetration at low altitude, high subsonic speed. By the modifications to the aircraft, we reduce the radar cross section very dramatically and we can then get better effectiveness against electronic countermeasures.

So, the B-1 variant that will be produced will be much better in penetration capability than the B-1 planned in 1977.

B-1 COST IN 1976

Senator STEVENS. I do not want to argue about numbers, so I will just ask if you will put in the record the estimated cost when it was presented in 1976. I think it was for fiscal year 1977 for the B-1 bomber. It is my understanding now that we are dealing with a projected cost in excess of $20 billion. Is that right, Mr. Secretary, for the 100 bombers?

Secretary WEINBERGER. The figure that has gone in is about $19.7 billion in fiscal year 1981 dollars and without cruise missile alterations Mr. Chairman. There are a number of different figures that are floating around, some of them in various hearings and various newspapers.

They include additional items that may or may not be necessary to be put on the plane. They include a lot of other things that in my opinion, are not properly chargeable to the plane, such as training simulators, additional test hours that we do not believe are required, but which certainly could be used, and additional kinds of maintenance facilities, things of that sort.

Some people are taking the individual costs of these items, adding them all on and saying that these are part of the B-1B. That is more a matter of accounting and definitional terms than anything else. We are talking about order of magnitude figures around $20 billion in fiscal year 1981 dollars for 100 aircraft. That is the figure that has generally been used in this overall balancing of the strategic programs that I mentioned.

We added one thing to the original estimate when it came in and that was the cruise missile capability.

[The information follows:]

FISCAL YEAR 1977 B-1 COST ESTIMATE

The total estimated acquisition cost for the B-1 bomber as presented in support of the Department's fiscal year 1978 budget estimate, which was the last estimate prior to termination of the program, was $24,825.7 million for 240 production and 4 development aircraft. The estimated procurement cost was $20,616.6 million and the estimated development cost was $4,209.1 million.

PER UNIT COSTS

Senator STEVENS. So that we understand each other, I voted for the B-1 bomber on several occasions before but I also voted for the M-1 tank when they told me it cost $600,000 a piece. This committee is now being asked this year for $2.7 million for each one. Our job is to make certain what we are talking about in terms of cost and to determine what process of modification this B-1 bomber is going to go through if it does go back on the line.

Now, this is 1981 dollars you are talking about, is it not? These are not delivered dollars?

Secretary WEINBERGER. This is $19.7 billion in 1981 dollars and the addition of the cruise missile capability adds $800 million. The $20.5 billion is the figure that we are using as our overall total at the moment.

Senator STEVENS. We were using a unit cost in terms of the committee's review of this of $251 million which came from figures that you supplied, $251 million apiece.

Secretary WEINBERGER. Is that in 1981 dollars, Senator?

Senator **Stevens**. That was initial procurement cost. The flyaway cost is not available.

General **Jones**. That should be in then-year dollars, Senator Stevens.

Senator Stevens. That is what I am trying to find out. What is the estimated cost of these delivered on an average basis?

Secretary **Weinberger**. You understand the delivery is spread over a number of years?

Senator Stevens. I understand that. So is the M-1 tank. We are finding out the average cost is for the last ones delivered. It is staggering compared to what we were told the tank would cost when we voted on it.

Dr. **Borsting**. The figure that Secretary Weinberger gave, $20.5 billion, is in constant 1981 dollars. If your are talking about then-year dollars including effects of inflation, the figure would be about $27.9 billion because of estimated inflation over the period of the contract.

Senator **Stevens**. You estimate that the total cost over the period of the contract will be $27.9 billion in actual year dollars?

Dr. **Borsting**. That is correct.

Senator **Stevens**. For the record give us that inflation rate, will you? That does not jibe with what we have.

Dr. **Borsting**. We are using the standard inflation assumptions that the President uses for purchases but we will be happy to supply them for the record. They vary from year to year.

[The information follows:]

INFLATION ASSUMPTIONS FOR DEFENSE BUDGET

Industry purchases (nonpay)

	Percent
1981 to 1982	8.4
1981 to 1983	7.0
1981 to 1984	6.4
1984 to 1985	5.4
1985 to 1986	5.0

Senator **Stevens**. I would hope the time will come when we stop that. We had that fight on the floor on the supplemental. The actual inflation rate is somewhere around 10 percent. If I am not wrong, wasn't one of the adjustments in terms of saving actually a reduction in inflation? Which I cannot understand at all.

I cannot understand how when inflation is still 10 percent that you will indicate that we are having savings because inflation is down to 8.4 percent.

[**Staff note**.—Projected inflation rate for nonpay purchases is 8.4 percent from 1981 to 1982.]

DIFFERENTIATION ON BUDGET INFLATION RATES

Senator **Stevens**. It is not possible for us to handle a budget and try to deal with our Budget Committee when we have figures like that. They are dealing with a different budget inflation rate than we are.

Secretary **Weinberger**. We try to use a single estimate of inflation throughout the Federal budget. It may be right or it may be wrong. We believe it is right or we would not use it, but we could not give you an estimate of inflation on one of these programs that differed from the one that the Government as a whole is using.

PROJECTED INFLATION RATES

Senator **Stevens**. I do not want to argue with you, my good friend. You have been in Government and other places including the Bureau of the Budget. I cannot understand the Department of Defense using an inflation rate in its projection for the outyears which is less than the current inflation rate.

Secretary **Weinberger**. We have high hopes that the President's program will reduce the inflation rate.

Senator **Stevens**. I have high hopes too, but until we get that, I cannot see how we can project. None of these has been realized. It was that hope that got us in this position with interest rates. Every time people bought Treasury notes, they had high hopes the interest rate would go down and they opted for short-term notes rather than long-term notes.

We cannot base a projection on items that cost $200 million a copy on high hopes.

Secretary **Weinberger**. We cannot give you an estimate of inflation that is different from that which the Government as a whole is using. We not only would have enormous confusion, but we will be adding to inflationary expectation, which is a basic element in the things that cause inflation.

We have to use a standard figure, and the inflation estimates that are ground into these so-called then-year dollars, are the inflation estimates that the administration as a whole is using. We are really not able to use anything else. Others can make different assumptions and they will of course get different results.

We would hope the inflation figures might even be lower, but we have to use the standard Government-wide estimate.

UNDERSTATEMENT OF INFLATION RATE

Senator **Stevens**. The only difficulty is this year this committee has to crank in money to pay for the inflation rate, the difference between the projected and actual rate of last year. We do it at a time when we are looking for new money to order new equipment.

That pyramids and the time is going to come when the problem of inflation adjustment in this committee is going to be as bad as the overall interest on the national debt is for the whole country. We really are misguiding the American public if they think this is all we are spending on this procurement because this inflation rate is understated.

In my opinion, it is intentionally understated. It is running in excess of 10 percent for the Defense Department. We all know it. It has not been less than 10 percent now for a period of 4 or 5 years, at the least. It is projected into the period of a new B–1 bomber as being even less, it came down to 8.4 this last time, the projection for this budget is 8.4 percent.

Secretary **Weinberger**. Senator, there are two or three elements here. One of them is the fact that this plane, to a very considerable extent, I think about 70 percent, has already been developed. There are some new things in it, but there is less uncertainty and less reason to be worried about overruns in this particular contract than with many others.

You spoke about the M-1 tank. I cannot quarrel with you about that. I was frankly astonished when I saw some of the changes in the cost factors of that when I first came aboard. As you know, the length of time that this program has been under development is much too long.

All of these things go into it. What we are presenting this morning is our best belief as to the total cost of the B-1B program expressed in 1981 dollars, which is one way of looking at it in order to avoid the vagaries estimating then-year dollars, which of course involves an inflation assumption.

When we use that inflation assumption, it has to be one that the Government as a whole is using. It is quite true that some of the special programs within the Defense Department do have a higher rate of inflation. They involve scarce materials and things that are not really part of the CPI. Present Federal policy obliges us to stay with a Government-wide estimate of inflation. We very much hope it is right or that we can get it lower. We cannot give you anything other than an estimate. The only estimate we can use is the one that the Government as a whole is using.

MODIFICATION COSTS

Senator **Stevens**. I do not think I am being unfair. The cost of the F-18's has escalated. Now we are modifying them, too. What about the modification for the cruise missile carrier? Is that included in your figure here for the B-1 bomber?

Secretary **Weinberger**. The modification to enable it to carry cruise missiles?

Senator **Stevens**. Yes.

Secretary **Weinberger**. Yes. It is an $800 million figure. It adds on to the $19.7 billion base figure. So that the $20.5 billion figure is the one that I gave you and that is in 1981 dollars.

Senator **Stevens**. Does that include modifying those bomb bay doors so that they can in fact have the additional storage of cruise missiles with a full complement inside? For $800 million, you can do that?

Secretary **Weinberger**. Sir, it is the full cost of enabling the B-1B to have a cruise missile capability in addition to its other capabilities.

Dr. **Borsting**. It includes internal carriage of eight missiles but does not include modification of the aft bomb bay which we do not think is necessary.

Senator **Stevens**. It does not include the aft bay?

Secretary **Weinberger**. It is not considered necessary.

General **Jones**. We have no plans for an enlarged aft bay. It does make two forward bays into one large bay where you can carry the long-range cruise missile as well as an external capability. It will have full missile carrier capability within that dollar figure.

Senator **Stevens**. It is my understanding then that the request that will be before us in terms of total request is about $25 billion?

Secretary **Weinberger**. For the whole strategic program?

Senator **Stevens**. Right, for this B-1.

Secretary **Weinberger**. The overall cost of the B-1B stated in 1981 dollars is $20.5 billion, $19.7 billion for the basic system plus $800 million for the cruise missile capability.

Senator **Stevens**. That is for all of the contemplated expenses including the modifications necessary for cruise missile carrier capability?

Secretary **Weinberger**. Yes.

GAO ANALYSIS OF B-1 COSTS

Senator **Stevens**. Have you reviewed GAO's analysis of the B-1 program which was made at our request?

Secretary **Weinberger**. I have not personally.

Dr. **Borsting**. The Air Force has a draft of it which I have looked at. Also, the Air Force has an independent cost study that has just been finished on the B-1 cost.

Senator **Stevens**. We are going to have a hearing tomorrow on that, the preliminary report. The GAO questions substantial reductions in the Air Force cost estimates and says that there are other very expensive requirements that are not in the estimate. One of which you say is not in it, and that is the cruise missile carrier capability.

If you have not had time yet, we would like to have your comments regarding this.

Dr. **Borsting**. We are reviewing an independent cost study, which is very close to the project administration cost study in the Air Force in total dollars. We also will look at the GAO study. We are having an ongoing review ourselves with our cost analysis group in the Secretary's staff.

COST OF RETAINING B-52

Senator **Andrews**. Mr. Secretary, if you do not go to the B-1, if you try to refit the B-52 so that it will hold until Stealth comes on board, what additional cost will we have there? In other words, what is the cost of the program if we try to make the B-52 fill in for those additional years?

Secretary **Weinberger**. We will get it for you in just a moment, and I do have it. I want to make this one statement before we do that. Our plan is to retire the oldest and least effective of the B-52's—the B-52D. That would help fund the modernization initiative.

If you modernize all the B-52's you have and did not build the B-1B, you would still not have a plane which would be able to penetrate the Soviet defenses beyond perhaps 1984, maybe 1985, right in that range. We do not know precisely because they are improving their air defenses all the time.

You would then be relegated to a cruise missile capability alone until you get the new bomber, and the date of that coming on line necessarily has to be problematical because, as I mentioned before you came in, it does have a lot of new things in it, new materials, new techniques, and so on.

If you went that route, you would be denying yourself a penetrating bomber capability for at least the last 5 years of this decade.

Senator **Andrews**. I am aware of that. It is the cost figure I am trying to get. It is not *x* billions for the B-1 versus nothing if we do not go to the B-1, but for the B-52.

Dr. **Borsting**. The B-52D retirement costs are $1.5 billion. There are other costs you would have with the B-52's, and I will probably have to get that for the record, that if we did not have the B-1 we would modify the B-52.

[The information follows:]

B-52 AIRCRAFT FLEET

The 100 B-1's requested are expected to be delivered between fiscal year 1985 and fiscal year 1988. The cost avoidances relative to the B-52 fleet due to introduction of the B-1 fleet are primarily related to retirement of the obsolete B-52D fleet commencing in fiscal year 1982 and amount to about $2.0 billion through fiscal year 1987. B-52G/H costs do not change significantly through that period and will probably continue at the fiscal year 1987 level through fiscal year 1990 at which time current long-range plans call for commencement of a B-52H phase-out program.

Secretary **Weinberger**. There is no question that obviously it will cost a lot less if you gave up the penetrating bomber capability for a 6-year period, whatever it turns out to be. We will get the exact amount. The cost of doing that is also a substantial one in strategic capability.

INTELLIGENCE AGENCY PROJECTIONS

Senator **Stevens**. Mr. Secretary, in my point of view, we are conducting these inquiries not only with one hand tied behind our back, but two.

I just left the CIA briefing and Senator Andrews was there, too. We have information which leads me to conclude that the statement you just made about 1984-85 is not consistent with the assessment of the intelligence agency of the country, that there is practically no difference until 1990 as far as penetration is concerned, whether we have the B-1 or whether we use the B-52 with the cruise missile capability. That is the information we have relied on.

Second, the other hand is tied behind me because I would like to ask you questions about the ATB and its cost estimate. I have been one of those who supported the B-1, I am a former Air Force pilot. I do not think anyone in Congress other than Barry Goldwater has been more dedicated to the Air Force than I, but I cannot understand how this country can afford to keep the B-52's flying, build the B-1 and go into the ATB development at the same period of time, particularly when you see what I have seen since I have been chairman of this subcommittee such as the cost escalations associated with things like the M-1, and the F-18.

I cannot find a weapon system that has come under cost estimates, not one. We really do not have one system. We have three systems we are asked to fund in a manned bomber category between now and 1990. This is such a pyramid that I do not think anybody realizes what it is going to be if it too gets out of hand from the point of view of cost.

Secretary **Weinberger**. It is not a pyramid. It reflects the length of time it takes to bring anything new on line. It reflects an attempt to not have any errors in our estimate of our capabilities to deal with situations that we may have to face.

BOMBER PENETRATION CAPABILITIES

I do not think there is any dispute regarding my finding that the ability to penetrate Soviet air space with a manned bomber is a capability that is vitally needed. We do not know the precise year in which the B-52's will no longer be able to penetrate, but the Soviet air defenses are strong and are improving. The B-52's have already been modified to enable us to go in very low altitude, to enable it to penetrate.

I have not seen any indications that the B-52 would be able to penetrate beyond the mid-decade with any degree of safety or any degree of reliability that would enable me, for example, to say to our pilots that you can safely do this

We are not interested in suicide missions in this Department. What we want to have is the capability to penetrate Soviet air space. We are not sure that we can get that with the ATB in time and not leave a gap in capability that would be very dangerous.

We have concluded, though it is a close call, that we should go with the B-1 and go with it in a way that does not end its usefulness when the ATB comes on, but leaves it with a very strong conventional and cruise missile capability that can be used in the next century.

Senator **Stevens**. Unless you are modifying the B-1 in a way this committee has not been notified of and the CIA has not been notified of, we have a conflict of testimony just this very day that is substantial in terms of whether or not the policies which have been recommended are proper, again from a financial point of view.

The testimony given us is identical to the testimony given to the House. When we read it, we did not believe it until we had a hearing this morning, before this hearing with you, in order to make certain that what we read was in fact the opinion of the agency.

CONTEMPLATED MODIFICATIONS TO B-1

Again, my point has to be in terms of trying to get information, are there any immediate modifications to the B-1 that are contemplated that are not funded within this $20.5 billion estimate you have given us?

Secretary **Weinberger**. There are modifications that we do not plan to perform. There are modifications that could be done.

Senator **Stevens**. I am saying that are planned.

Secretary **Weinberger**. My understanding is and the information that I have extracted is that all of the costs of the things that we think have to be done to the B-1 are included in this $20.5 billion estimate, stated in 1981 dollars.

MULTI-YEAR CONTRACTING

Dr. **Borsting**. If I could add to that, there are some savings that we are trying to make in this program. One of the items is multi-year contracting. According to some preliminary estimates, once the configuration of the B-1B is firm we could potentially save up to $800 million for the multi-year contract. However, this is extremely speculative at this point and we are still looking critically at such claims.

If for some reason the multi-year procedure is not approved by the Congress, then we could not save money because we could not have a multi-year contract.

Secretary WEINBERGER. That is not a modification of the plane.

Senator STEVENS. The savings are built into this estimate?

Dr. BORSTING. The savings are built in at this point, only the out years are affected.

Senator STEVENS. I see no problem with that. This committee has supported this concept for a long time.

Secretary WEINBERGER. I could get in any kind of appropriate form, the information that you have and which you feel differs from the general estimates that we are presenting this morning. We are not trying to do anything other than secure, with the margin of safety that we can, the strategic capability of our forces.

One of those capabilities that we feel is essential is the ability to penetrate Soviet air space should that ever become necessary. That is why, though I am perfectly willing to agree that it was a close call, we did conclude, and the President did conclude, that the B-1B is an essential addition because it gives us this capability for a few more years until the new bomber comes along. The B-52 would not have that capability.

This is based on certain assumptions in connection with the strength of the Soviet air defenses.

AVAILABILITY OF ATB-TYPE MANNED BOMBER

Senator STEVENS. I am glad that we are going to be modernizing and maintaining some of the 52's during that period. We are going to be introducing the B-1 during the period and hopefully after the turn of the decade hope to have an ATB-type manned bomber available.

Secretary WEINBERGER. The modernization of the B-52's is not a modernization that will enable them to penetrate Soviet air defenses for any reasonable length of time. It is a modernization which enables them to have a stand-off cruise missile delivery capability. That is being done with the newest ones. The older ones we would plan to retire. They will all be retired in the 1990's as the new bomber comes aboard.

What we feel we cannot afford, frankly, Senator, is a gap, a period in which we are not able to do things that we think we should do. Those necessarily involve estimates. They involve estimates of our own ability to penetrate and estimates as to the capability of the Soviet air defenses.

ADVANCED TECHNOLOGY CRUISE MISSILE

Senator STEVENS. We are developing ongoing research as far as the cruise missile itself is concerned. I do not know what name you put on it, but there is an advanced technology cruise missile coming, too, is there not?

Secretary **WEINBERGER**. The difference between a cruise missile and a manned bomber, as you very well know, is a matter of time and it is a matter of ability to hit targets of opportunity with great accuracy and to know the results immediately. All of these things are very important.

General Jones probably has a lot more additional data that he can add to this, but I just feel that we should not have any misunderstanding. What we are trying to do is not engage in a lot of unnecessary buying, to which I am obviously very much opposed, but rather to avoid a gap, not to leave a period of time in which we are not able to do things that we feel are essential for us to be able to do.

This is not an area or not a field in which you are allowed much margin for error. That is why I think it is essential that if we decide we do not want to do the B-1, we should recognize that this will result in a period of time in which—I cannot figure precise months—we are not able to penetrate those defenses with a manned bomber and I think that would be a serious loss.

If we are going to do it with a plane that becomes obsolete the instant we get the ATB, that would also be a rather extravagant way to do it, but we are not. The B-1 will serve well into the next century in a number of other missions for which it may be needed.

Senator **STEVENS**. Again, I regret the fact that there are people who have asked that we hold this hearing so they could present their questions to you, but they are called to the markup. You have seen two of our colleagues have been called over there and being involved directly in items of personal concern to their States. They will undoubtedly have some questions submitted.

Secretary **WEINBERGER**. We will be glad to answer, Senator. The classified questions we can also answer more conveniently in that way. Whatever, your pleasure is, we will be glad to try to accomodate.

ESTIMATES ON COST OF HARDENING SILOS

Senator **STEVENS**. Let me move to the MX so that we might have a record before this committee. The revised MX system will cost $2 billion for fiscal 1982, including $30 million in military construction. That is, as you pointed out, 100 missiles to become available in 1986, to be deployed first in the existing ICBM silos that are going to be hardened. Are there firm estimates of the cost of hardening those solos?

Secretary **WEINBERGER**. "Firm" is the operating word. We have order of magnitude estimates and a lot will depend on which particular silos are chosen. Obviously we are going to choose the silos that physically lend themselves most readily to this hardening.

It depends on the soil conditions and certain rock formations and that kind of thing, adjacent territories and all the rest. We have a preliminary estimate of the construction cost of silo hardening. That is, adding the additional military construction costs for the extra hardening, moving it up to 5,000 psi, is about $10 million to $20 million per silo.

There is a total cost, of course, which is higher than that and that is the total cost of basing MX missiles in the existing silos including research and development, procurement and construction.

For that we have an estimate in 1982 constant dollars of about $140 million per silo. That again is based on a deployment of about 40 of the missiles in reconstructed Minuteman silos. We may not do that much. We may not deploy that many because we hope within the next 2 to 3 years to have a much better method, a much more survivable method of deploying the missiles. The R. & D. is proceeding on that at once.

DEPLOYMENT OF MX MISSILES IN 1984

Senator **Stevens**. Will we actually be deploying some of these MX missiles in calendar 1984?

Secretary **Weinberger**. What we want to do, Mr. Chairman, is to have the silos, the reconstructed hardended silos, ready in some numbers as soon as the MX comes off the production line rather than simply putting them in storage. We believe that by 1986 there will be 9 or 10 silos and missiles ready.

We believe also by that time we should have our better basing method, our more survivable method identified. We will then start moving toward that. What we are talking about does have some uncertainty in it. If we can get a more survivable method of deploying them, obviously we would prefer to do that rather than simply put them in hardened silos, which of course have a degree of vulnerability.

Senator **Stevens**. Do you have any estimate of how long they would remain secure bases for MX missiles?

SURVIVABILITY OF GROUND-BASED SILOS

Secretary **Weinberger**. There is a vulnerability to everything that is ground based. The factors here are the degree of additional accuracy the Soviets will achieve if they continue to modify and improve their ICBM's with their hard target kill capability—and our ability to get a more survivable mode of deployment, either deep underground basing or some form of ABM that can make their targeting problem more difficult, or some kind of continuous airborne patrol.

Again, these are the things that we are going to examine. We know right now that the 600 psi hardened MPS shelters are not survivable. So we decided not to put the very large amount of our resources—that would have been required for that system.

What we are talking about with the strengthened existing silos is an interim solution to give us some added strength and some degree of survivability until we can get a better, more permanent capability.

COST OF ADDITIONAL R. & D. FOR B-1 BOMBER

Senator **Stevens**. Let me apologize. There was one question I was asked to direct to you about the B-1, and that was: What is the estimate for additional R. & D. for the B-1?

Dr. Borsting. Are you talking 1982?

Senator Stevens. Throughout the period of the program.

Dr. Borsting. I have that here.

Senator Stevens. We will print that back in the other part of the record.

Dr. Borsting. The R. & D. total would be about $2.4 billion in total for the baseline B-1B program. That is in fiscal year 1981 dollars.

Senator Stevens. That leaves the question of why, if there is a bomber we almost put on the line before and now we have had this period, I think we have had some almost $2 billion since that period appropriate for ongoing research. What is the necessity for additional research once you have made the decision to go ahead with the B-1?

ENGINE CAPABILITY IN B-1

General Jones. Mr. Chairman, when the program that was in being in 1977 was terminated, we still had considerable research and development to complete, but the basic airframe had been proven to be a very capable system. We have had a lot of engine problems in many of our weapon systems in the past. In fact, that has tended to be the biggest problem. Engines for the B-1 have proven to be very, very good. We have a good, sound airplane, but we still have considerable research and development to do, particularly on the avionics subsystems and flight testing, and in a number of other areas.

ESCLATED COST OF WEAPON MODIFICATIONS

Senator Stevens. It seems that is one of the difficulties with the M-1 tank. Every time someone in the research section decides something new ought to be cranked into it, it is cranked into the items in the line and all those modifications are what have escalated the cost. It happened on the F-18, too.

Secretary Weinberger. You are absolutely right. That is one of the problems here, and there is the cliche that the search for the best drives out the good. You are always trying to have the best possible system. It is very understandable that as new things come along people concerned with the development and deployment of these weapons want to have the very latest features added to them. That is perfectly understandable.

At some point, as you say, you have to draw the line and say this is it, this is the final model; even though we have this great new compass that will do all the other things that might be developed by next September, we are not going to include it. It is essential that that kind of decisiveness be exercised in many of these programs.

That is really the story of why the 1970 B-1 that I put in the budget was not ready and finished in 1976 and 1977. New things came along that people wanted to add. That is certainly the story of the tank, plus a lot of the other production problems and a great many other things that raised the cost astonishingly.

Senator Stevens. Even someone that had a new Cadillac he was buying who also had a new Rolls-Royce on order would not be very intelligent if he spent a lot of money modifying the Cadillac before the Rolls-Royce was delivered, and to have additional research money dedicated to the B-1 when we are dedicating so much money to the ATB. It seems, again, to be a redundancy that someone ought to look at.

Secretary **Weinberger**. First of all, on your analogy I would completely agree, but that is not what this research and development money is for. This is to get the completed airplane that will be used for a number of years strategically and a much longer number of years conventionally. It is as General Jones said, research and development that was not completed when the plane was canceled and it is necessary to produce the plane.

We may have a terminology problem here as to what is properly defined as research and development.

Senator **Stevens**. Research that leads to certain modifications while the plane is on the line. We have the same thing with the M-1.

Secretary **Weinberger**. It is not because the decision has been taken to produce the plane in the way it is now. What is needed is the research and development to complete that design and bring us that designed airplane.

SILO AVAILABILITY FOR 1986 PROJECTED MX MISSILES

Senator **Stevens**. As far as the schedule of the MX, as I understand it you stated the target availability of 1986 is attainable in view of the problems that are again related in this area as far as research and development for the MX.

Secretary **Weinberger**. Let me get the dates correct. The first flight test of the MX will be in 1983. The initial missile procurement will be in late 1983. The initial deployment will be in 1986. That is for up to 50. As they come off the line, we want to get these missiles deployed into hardened silos.

Senator **Stevens**. That is what we are trying to find out. Will the silos be hardened in time to take the missiles that will be available in 1986? Is that the plan?

Secretary **Weinberger**. Yes, sir.

Senator **Stevens**. Is the cost of that hardening firm enough now so that it also will not have any cost overrun aspects?

Secretary **Weinberger**. We believe that it is, Senator, and it is included in the $180 billion overall total that we gave at the beginning of the hearing.

EVENTUAL DEPLOYMENT OF MX MISSILE

The other thing I want to say about it is that as we move toward the ultimate deployment of this missile we may very well reduce the number of hardened silos that we would construct, because we would much rather put the MX in its ultimate basing mode than in an interim mode.

We think it is essential to have the MX missile useful as soon as it starts coming off the line rather than simply stacking it up in warehouses. We also think it will give us for an uncertain length of time, an essential survivable mode, but it is definitely not the permanent way that we want to deploy the MX. Ultimately it will be as vulnerable as the missiles that are in existing silos.

But the hardening will help. It will give us a little additional survivability. It gives us a little time while we hunt for a more survivable mode. The real problem is—with the Soviet development of accurate missiles and their hard target kill capability—that the ground systems as we know them cannot be protected.

MULTIPLE AIMPOINT SYSTEMS

You can go to very elaborate, enormously expensive multiple aimpoint systems, but again none of these are sufficiently hardened and the Soviets are not constrained by any shortages of missiles.

Senator STEVENS. I am not being critical, and we know the decision was just recently made as far as the MX basing mode, but we don't have a budget justification yet. The information we have indicates there is a heavy budgeting in the out-years in R. & D. for the MX beyond the period of deployment.

Can you tell us what that is related to?

Secretary WEINBERGER. If it is beyond the period of deployment it is not properly labeled. Essentially what you do with all of these things is that you try, after deployment, to see if modifications or improvements can be made based on the latest technology. You can do that before they are deployed, which is one of the reasons for the delay in the B-1 and in the tank and everything else, or you can bring them on line and then start improving them later on.

Dr. BORSTING. The dollars tail off very much in the out-years. They are very high in 1983, as you might suspect, on the MX program. There are $3 billion in then-year dollars in fiscal year 1983 R.D.T. & E. Then it is $2.5 billion in fiscal year 1984, $1.7 billion in fiscal year 1985 and then it goes to $0.7 billion in fiscal year 1986.

FUTURE R. & D. PROJECTIONS

Senator STEVENS. We don't have justification that indicates in years after this year there will be research and development.

Dr. BORSTING. Yes, there will be. This year there is approximately $2 billion for R.D.T. & E. for the MX for the basing mode and missile.

Senator STEVENS. What is happening to the Minuteman now with this program and the appropriation requests?

MODIFICATION CANCELLATIONS

Secretary WEINBERGER. The Minutemen will remain in their existing silos. There are some improvements that are planned for those. There are about 1,000 Minutemen deployed today. We are canceling some of the modifications that we had planned for them.

Senator STEVENS. Was that the survivable power program that we were told about before?

Secretary WEINBERGER. The data that you are now asking about, Senator, is classified. I have it before me, and I will be glad to give it to you directly.

Senator **Stevens**. I would appreciate it if you would put it in the classified portion. There is going to be a substantial change in the Minuteman program.

Secretary **Weinberger**. Yes, because we would no longer be proceeding on the assumption that that was our only missile.

Senator **Stevens**. The staff tells me that that one concept of cancellation in that one program I asked you about has been declassified, but I don't want to get into an argument.

Secretary **Weinberger**. The only sheet I have before me is classified I certainly can give it to you, and I can put it in the classified record.

[The information follows:]

MINUTEMAN SURVIVABLE POWER

Turning to our existing force of Minuteman missiles, fiscal year 1982 markes the final year of procurement for MK-12A reentry vehicles for Minuteman III. The retrofit of this higher yield warhead on 300 Minuteman III missiles (900 RV's) will be complete in early 1983.

We will continue ongoing improvements in Minuteman command, control, and communications. Satellite terminals (AFSATCOM) will be installed in launch control facilities starting this year, and improved low frequency and teletype (SACDIN) capabilities will be installed starting in 1984.

Plans to install longer life batteries (Minuteman extended survivable poser) and to enhance Airborne Launch Control System Capabilities (ALCS phase III) for 200 MMIII missiles have been canceled as part of the recent reductions in the fiscal year 1982 defense budget. These programs may be reconsidered in the future.

All Titan II missiles will be retired. Those missiles would have been an average of 23 years old at the end of fiscal year 1987. There are currently no missiles available for operational testing. The safety and readiness of Titan II, the only remaining liquid-fueled missile in the U.S. arsenal, has been called into question as a result of recent accidents.

LONG-TERM OPTIONS ON MX DEPLOYMENT

Senator **Stevens**. You are going to be reviewing long-term options for the further use of MX between, as I understand it, air-launched capability and a deepened silo option.

Secretary **Weinberger**. Yes, sir, and a related one which is the so-called south side of mesas. Since the Soviet missiles come in from the north you get them in a mode where they have a much greater degree of survivability. What we are looking for is survivability and a higher degree of protection than we now have or that we now can get with any straight, ground-based system.

Research and development will proceed on those three modes. We expect to make a decision by 1984. After the bulk of the MX's are off the production line, we plan to have them deployed in whatever mode is chosen, maybe two or three different ways. The whole objective of this is to get a ICBM system that is survivable as the submarines are to a very considerable extent—today.

COMMON MISSILE

Senator **Stevens**. That leads me to another question. We did not opt for a common missile, we are going to have two separate missiles.

Secretary **Weinberger**. We studied the common missile at some length and concluded that we would lose enough in both to make it not nearly as effective or not nearly as useful as the two. With a common missile sized for the submarines, you would lose range, payload, and accuracy when that missile was deployed as an ICBM.

We studied that at some length because that had attractive features to it at the beginning. There are a great many stories in the press and elsewhere that it had been adopted and recommendations for it had been rejected and so forth. None of those was accurate. We were examining it at all times.

What was happening was that various drafts or preliminary memoranda about particular aspects of the strategic program were being leaked out one after another. The decision was based entirely on military grounds that the common missile would end up being less effective than either of the two, the submarine-based D5 or the MX.

REVISED BUDGET FOR TRIDENT SUBMARINE

Senator STEVENS. Turning to submarines, we have a revised budget of $4.3 billion for fiscal year 1982 for the Trident submarine and missile development for that submarine. About $1 billion was deleted from the budget. That will slow the construction of that portion of the Trident.

Could you tell us why that occurred?

Secretary WEINBERGER. Are you speaking of the submarine or of the missile itself?

Senator STEVENS. My understanding is that is the total budget. Again we don't have the breakdown and justification. Your statement mentions a 10th Trident submarine. The more detailed sheet we have speaks of deletion of two submarines scheduled for fiscal years 1985 and 1987. We are confused about what is the pattern for the Trident.

Secretary WEINBERGER. The pattern is that you have a set of projections for past years as to how rapidly the submarines would be produced. Unfortunately that has not been met. As you know, the *Ohio* is 2½ years late. It is now operating finally, and we have had a whole series of dicussions with the builder. We now have what we believe is a much better contract in which there is some penalty for delays and some incentives for speed. We now have what we believe is a realistic and achievable estimate of one submarine a year.

It is conceivable that with the incentives that will be in the new contract we may get them a little more rapidly than that. However, rather than telling you we are going to get one and one-half a year, or two every 3 years, we believe that the accurate achievable estimate now is one a year and with the contract incentives we hope to better that a little bit.

At the monent we are budgeting and planning on that. The 1982 result of that is a rather sharp reduction in the request.

10TH TRIDENT NOT AUTHORIZED

Senator STEVENS. My information is that there is a billion dollars deleted from this year's budget. The staff note indicates that the 10th Trident was not authorized by the authorizing committee. Is that the reason for the deletion of a billion dollars?

Secretary **Weinberger**. Partly. The basis for the deletion as I understand it, is because we are no longer asking or making requests based on an unreasonable delivery schedule. I would much rather we could have met the original delivery schedule, but we could not. We have not met it in the past and the contractors have had no contractual inducement to meet it. They do now. We now believe this is the rate at which the submarines can be delivered, one a year, but I hope we can do better than that. If so, that will be reflected in later requests.

Senator **Stevens**. We will submit all our other questions for the record.

INCREASED R. & D. FUNDS FOR ABM

On the ABM, I am told by the staff that you are adding $100 million to the $400 million already budgeted for R. & D.

Secretary **Weinberger**. R. & D. for what, Senator?

Senator **Stevens**. For ABM. Is that right, and is that classified?

Dr. **Borsting**. In 1982 for ballistic missile defense we are adding $52 million.

Senator **Stevens**. $52 million.

Dr. **Borsting**. Yes, sir.

Senator **Stevens**. Is that for research and development?

Dr. **Borsting**. Yes.

TREATY LIMITATIONS ON DEPLOYMENT

Secretary **Weinberger**. None of it would be deployment because we have the treaty limitations.

Senator **Stevens**. That is what I want to get to, the treaty issue.

Secretary **Weinberger**. None of the requests we have made requires any change or constitutes any violation of the treaty. They are all research and development funds to enable us to try to obtain a better ballistic missile defense. If we can get something that is more effective than we have now, then we would basically have the question as to what effect the treaty might have on that.

At the moment all we are doing is studying, examining, and trying to develop a more effective system. The system that we have now, that we could put in place, has only about a 50-percent effectiveness. It would only take care of about half of the incoming war-heads. That to my mind is not nearly good enough. So we don't plan to deploy that. What we are doing is studying to see if we can get something better.

Senator **Stevens**. Mr. Secretary, based on known technology, could we deploy an effective ABM-BMD system to protect the silo-based MX missiles within the confines of the 1972 treaty.

Secretary **Weinberger**. Not effectively, in my opinion. You could deploy one that would take care of many of the incoming warheads directed against it, however, I would not classify what we could do now as effective. As of now, the treaty permits us to deploy a system in one of two specific areas. The Soviets have their system deployed around Moscow and we have chosen not to maintain a deployed system after the one we had some years ago.

I don't believe that the state of the art in this field is effective or sufficient to warrant the expense involved with deploying one at this time, but we do think that it is fully worthwhile to examine the question of whether we could not get something much better.

General Jones. There are two points. One is that the effectiveness of the system, as the Secretary points out, is not up to meeting a threat with all of the thousands of warheads the Soviets have. Secondly, we would be restricted by the ABM treaty in deploying an effective system for full protection of silos.

Senator Stevens. Thank you very much.

Senator Andrews?

Senator Andrews. Thank you, Mr. Chairman.

EFFECTIVENESS OF ABM VIS-A-VIS SAFEGUARD

Mr. Secretary, on the ABM system you just said it is about 50 percent effective at the present state of the art. Is the present state of the art considerably upgraded from the Safeguard system that was in place at one point in time before it was shut down?

Secretary Weinberger. I think upgraded is a fair way to state it.

Senator Andrews. So the sytem that you say is only 50 percent effective and is not satisfactory to you is, in fact, better than the one that was deployed and that was shut down?

Secretary Weinberger. My understanding is that that is correct.

Senator Andrews. There is considerable comment that that was a workable system and was shut down despite the fact it was an excellent system and could give us all the protection that was needed.

Secretary Weinberger. Different people have different views. I am giving you my views.

DEVELOPMENT OF EFFECTIVE BMD SYSTEM

Senator Andrews. When you are talking about MX, unless you deploy it with an ABM system or BMD system which it has now become, aren't you in fact just inviting the targeting by the Soviets of the silos with ten warheads?

Secretary Weinberger. You are doing that, Senator, whether or not you put a BMD system on it if you are talking about the present BMD system. One of the options we want to explore and one of the things that requries the addition that Dr. Borsting referred to a moment ago in the R. & D. for ballistic missile defense is the attempt to develop a better system. If you can get a really effective missile defense system, then it does not matter particularly whether you have your missiles in already targeted silos because you can, by definition, protect them.

So one of the options that we are looking at for permanent deployment of these MX's, is whether or not we would be able to develop a more effective BMD system. If we can do that, it would be clearly a way to deploy at least some of the MX missiles. We don't have it now and that is what we are looking for. When I say we don't have it now, obviously that is my opinion. Maybe others differ on it, but it does not seem to me that anything that takes care of only half of the incoming warheads is really a very good system.

FUNDING OF UPGRADED SILOS

Senator **Andrews**. If this committee is asked to fund the upgrading of the silos—as I recall, you said you wanted to get up to 5,000 pounds per square inch capability, which represents considerable steel and concrete—could changes be anticipated down the line? Senator Stevens quite rightly pointed out, and I share his concern about the cost overruns, could we anticipate that after we have heavied up these silos and put MX's in them, that you or your successor will come back and say, "That is fine, but we have now come to the conlcusion that we need a BMD tied in with it so we are going to take them out of all of these silos we have retrofitted and put them over in county *X* where we can protect them with a BMD system?

Secretary **Weinberger**. I would think the latter would be very, very unlikely. What conceivably could happen would be that someone would come and tell you that now at least we have a good BMD system which we will deploy around the existing hardened silos. If your question is, is it safe not to do some hardening while you are looking at whether you can get a better, more survivable method, I would have to answer that in, my opinion, I don't think it is safe to do that.

I do have to say that I very much hope the silos will not be needed and the hardening will not be needed, and none of it will ever have to be used. It is the margin for error that bothers me. I don't have much margin for error.

I can't come before you with requests that I think are inadequate or not going to fulfill the responsibilities we have to give all the protection we can during a period in which we see a developing gap, a developing imbalance brought about by the fact that we have not modernized, we have not done all these things over the years and now we have to do them all at once.

What I feel is necessary is what we have asked. It is to develop the new missile which is in an advanced stage of development now, to bring it into production as soon as we can with its greatly increased accuracy, its ten warheads and its ability to get at hardened Soviet targets. Furthermore, to deploy it as soon as we can in the most survivable mode that we can—even though it is not the ultimate solution by any means—where simultaneously studying better means, one of which may be a continuous airborne patrol, one of which may be a silo protected by a much better BMD, one of which may be a deep underground basing or south side of mesas and then move to that.

ALTERNATIVES TO MX DEVELOPMENT AND PLACEMENT

The other alternative is to do nothing and hope for the best. There is another alternative in which you bring the MX's on and let them stand in warehouses until you decide the best method of deployment. We don't want to follow that course. We want to follow the path that we have recommended. That is the one I am urging you to support. Obviously, the ultimate decision is yours, but these are the things that we think are the ways in which we can fulfill our responsibilities to strengthen our strategic forces in such a way that they will continue to be an effective deterrent against war.

Senator **Andrews**. Certainly, Mr. Secretary, there is no thoughtful person in the Free World or even behind the Iron Curtain who doesn't share that feeling with you that we hope this weapon system that we are talking about never has to be used.

The trouble is to protect freedom you have to have the weapon system, you have to have the capability to retaliate. We also have to do the job that we are asked to do by the people we represent to make sure that some plan is in your mind for the location of these silos so that we are not going to see them ripped up and moved out again to make way for BMD.

The question is are you structuring these silos that you are planning to refit in such a way that they will be located so that if it comes to the choice of a BMD, BMD can be deployed at those sites.

Secretary **Weinberger**. Yes, Senator, of course. There would be no doubt in my mind that what we want is the kind of BMD that can be deployed in such a way as to protect the various targets that we conclude should be protected, and silos would certainly be in that category. There would be a requirement for a far more effective BMD, but that BMD would not determine the location of the targets to be protected. You design your BMD system for the targets you desire to be protected. Those would be, in this case, the hardened silos.

B-1 BOMBER

Senator **Andrews**. On another weapon system that we touched on briefly earlier, and on which we got into a great deal of depth in a closed hearing an hour or so ago and that is the B-1. You are asking Congress to decide whether we can in fact afford to maintain the B-52, whether we can afford the B-1, whether we can afford Stealth. At least that is the way it occurs to some Members of Congress.

Secretary **Weinberger**. I do have some quarrel with that formulation.

TIMEFRAME BETWEEN B-1 AND STEALTH

Senator **Andrews**. That is why I want to give you an opportunity to respond. My thinking has been that the B-52, with the number of airframe hours we have on them, and in talking with the individuals who handle the B-52's in my home State, I am told about the problems they have, they can't even get landing gears or other parts because the places that made them are no longer in business.

Do we need a B-1 to bridge the gap between the Stealth down the line and the B-52's that are aging and do we need a B-1 if Stealth is coming onboard in 1987, as I have been told you said, or is this a correct statement?

Secretary **Weinberger**. No; Stealth would not be available that early, Senator Andrews. Let me give you a general response to that and General Jones can add additional details about the landing gear and other points you mentioned.

My answer is yes, we do need the B-1B. We need the B-1B because it will cover a gap that we regard as potentially quite dangerous. You are going to have a period of time, and I can't give you the precise number of months; when even the moderized, improved B-52's will no longer be able to penetrate the Soviet defenses.

If you can conclude, as we have, that you need that capability in a manned bomber, you have to get something else. I would be delighted if I could guarantee to you or to the President that the advanced technology bomber would be ready at that period of time so that there would not be any gap. We can't do that. It involves a lot of new things. There is no way we can make that guarantee. We are confident, however, that the B-1 can do it and it will be ready in time to cover the gap.

It is also a plane which will be usable well into the next century in a conventional role and as a cruise missile carrier. It is not a plane which is going to be outmoded or obsolete within 3, 5 or 6 or some other number of years that we have seen in some of the cartoons and other discussions of the matter. It will be a plane that will have a capability that will run into the next century. We do feel that there will be a period of time in which the B-52's, even if modernized, will not be able to do more than stand-off and deliver a cruise missile and that we think is not enough. Again, it is a matter of this margin of safety and margin for error.

We can't guarantee any of these actual dates because it depends on how soon the Soviet air defenses, which are continually under improvement, reach a point where you can not ask the pilot to take a B-52 in.

PENETRATING CAPABILITY OF B-1

Senator **Andrews**. Can a pilot take a B-1 in?

Secretary **Weinberger**. We think so because it is vastly improved. It has a smaller radar cross-section. It is a more survivable plane with greater capability.

Senator **Andrews**. Is the B-1 radar profile classified?

Secretary **Weinberger**. We can give you that in classified form and we will be glad to do that.

[The information follows:]

B-1 RADAR PROFILE

Radar cross-section varies with azimuth, elevation, and frequency. We have measured the original B-1 in flight from [deleted].

The frontal radar cross-section of B-1A Aircraft No. 4 was about (d) square meters. A [deleted] to be incorporated in the improved B-1B was measured at an Air Force facility last fall. Its frontal radar cross-section for the same region of coverage as the B-1A was about [deleted].

B-1 RADAR PROFILE

Senator **Andrews**. I am trying to find out what we can get at in open hearing here to justify what you are asking us to do.

General **Jones**. It is a marked reduction from the initial B-1 and even more so from the B-52 not to the point that you could not see it on the radar screen, but when you get that much smaller radar cross-section, then your electronic countermeasures are more effective. You don't need as much power. It is a combination of dramatic reduction in cross-section and improvement in electronic countermeasures that gives us confidence of penetration capability well into the 1990's.

Senator ANDREWS. You are going to have to share the information with the people who testified to us today. That is not the impression we had.

Senator WEINBERGER. We had that indication from the chairman. We certainly want to find out what that is because that is not our information. The information we have is that at some period in the next few years, around the mid-decade, the B-52's will not be able to do the job any longer. The B-1B's will have that capability until the new ATB comes aboard.

B-1 PROTOTYPE

Senator ANDREWS. The point is that the B-1 we are talking about, that is in the President's buy package, is a significantly different B-1 prototype than we flew 7 or 8 years ago.

General JONES. The basic airframe and engines, talking about the wing and structural integrity, are the same. There are changes in the inlet ducts to the engines that will reduce the radar cross-section. We are not developing a new airplane, but from a penetration standpoint there are some very significant differences. I have seen part of that testimony you talked about, Senator Andrews. I don't think there is an inconsistency there. There may be a difference in words where I believe they said that the Soviets would——

Senator ANDREWS. It was not in the prepared testimony. It was in response to questions I asked.

General JONES [continuing]. Have the technical ability to pick up the B-1 and shoot at it. There is no question about that if you just flew a B-1 into their radar net and did not use your improved countermeasures and other techniques, but with a reduced radar cross-section and electronic countermeasures we have very high confidence that the B-1 can penetrate well into the 1990's.

B-1 DELIVERY DATE

Senator ANDREWS. When do you anticipate delivery of the B-1?

General JONES. It depends on when the contract is let for approval and so forth. If we move expeditiously the Air Force says they can have the first airplane delivered by the end of 1984, with the initial operational capability in 1986.

Senator ANDREWS. And the balance?

General JONES. Out through 1988, I believe.

STEALTH DEVELOPMENT

Senator ANDREWS. When then would you plan to bring Stealth along?

General JONES. Senator, I don't think in open session we should talk about the specifics of Stealth. There is clearly a number of years difference. You get people to argue how many years, but it is a substantial time period between bringing the B-1 and the advanced technology bomber.

Senator **Andrews**. I think it is extremely important. I can understand why the specific dates are difficult and I would suspect if the B-1 does the job that you may not need Stealth quite so soon.

B-1 AND STEALTH COMPARISONS

General **Jones**. I think that is wrong. There is an image that the B-1 and the Stealth are in competition, that they both do exactly the same thing. The B-1 initially would be primarily a penetrator with some secondary capability as a cruise missile carrier. It will also have a very good conventional capability. As time goes on, its cruise missile carrier role becomes the dominant capability as the ATB takes over the penetration role. Some think the multiple systems as being bad. We have fallen into a trap by not doing much in strategic forces in many, many years, and how we start up a few strategic programs and it seems like we have too many. Look at the Soviet Union, and what they have done, and the number of their strategic systems in development. Their procurement far exceeds ours.

Look at the ICBM's, SS-17's, 18's, 19's being deployed simultaneously while several other ICBM's are in development. Nobody questions that. I don't see the B-1 and ATB as in competition. We need to keep the B-52 going as best we can, solving problems with spare parts, and so forth, and give it an improved missile carrier capability, then bring on the B-1 and then bring on the advanced technology bomber. Remember that we are looking at less than 15 percent of the total Defense budget for the entire strategic force, including the submarines and ICBM's as well as the bombers.

I think it is a good bargain for less than 15 percent to improve the one thing that this world pays most attention to—and that is the strategic balance between the United States and the Soviet Union.

ACTIVE JOINT USE OF B-1 AND STEALTH

Senator **Andrews**. The point you have just made, General, is totally different from the understanding that the public has had. The average American has felt that the B-52 will be replaced by the B-1 which will be replaced by Stealth. What you have just told this committee is that Stealth and B-1 complement each other and because of their different characteristics they would give the manned bomber component of our Nation's defenses the ability to penetrate better, to be able to, shall we say, confuse the enemy because we aren't talking about a single bird with a single characteristic. Am I right on that?

Secretary **Weinberger**. The only thing I will quarrel with, and I will let General Jones finish, is that you said the Stealth would then replace the B-1B, giving the impression that the B-1B will be put in the warehouse or something. The B-1B has important continuing capabilities in nuclear or conventional war. It will have that even after the Stealth is fully operational.

Senator **Andrews**. That is what I understood from what General Jones said. I pointed out that the general public has been looking at this as a replacement: The B-1 for the B-52 and replacing the B-1 with the Stealth.

Secretary **Weinberger**. It is that additional margin of strength that we need for different kinds of things. You are right, I would agree, there is an incorrect public impression about it. It is very difficult when you are talking about a bomber that has to be kept highly classified, and which should have been kept more highly classified than it is.

Senator **Andrews**. With the B-1 and Stealth in inventory then the B-52 would in fact be phased out and retired?

General **Jones**. Ultimately. That would not necessarily be when the first ATB comes on.

Senator **Andrews**. You still have some C-47's around some place?

General **Jones**. Not very many. I don't think we have any in the active fleet. Yes, we would go through a progression of replacements.

TRIAD

Another point to make, Senator, with the uncertainty with regard to the ultimate ICBM force, I think it is even more important that we make sure that the bomber leg of the triad is strengthened with both programs, both the B-1 and advanced technology bomber.

Senator **Andrews**. I am not so sure we need to maintain the Triad. I have been suspicious for a long time about the crazy missiles ever since I stood in that North Dakota wheatfield and watched them try to fire the last one, which they were not able to fire. I think all the generals there would have given anything for a sergeant with a Zippo lighter to get it going. It was an eerie feeling to think that our survival and the survival of mankind rests on who can push the button the fastest.

I like to have something that can still be recalled and still have a sense of judgment about it. I am for emphasizing the bomber side of this.

General **Jones**. I am a strong advocate of the Triad. I didn't mean to imply that this uncertainty means a departure from going with the triad. It is just that the ultimate basing mode for MX—when it would come on and its survivability—I think, is somewhat uncertain. In view of that it makes it even more important that we do everything we can to strengthen the other two legs of the triad, particularly the bomber leg.

REFUELING REQUIREMENTS FOR BOMBER FORCE

Senator **Andrews**. If we go ahead with the B-1 program do we need a different type of refueling than we have? I understand the tankers are being closed out. Are the ones we presently have adequate to take care of the B-1?

KC-135 REENGINING

General **Jones**. We plan to reengine the KC-135. The KC-135 tanker is the primary tanker for the strategic forces. The KC-10, for which I was strong advocate—and I am sorry we don't have the money to keep the procurement going—is a successful program and is on schedule. It is primarily for our tactical deployment—particularly where we have base limitations overseas. The KC-10 had much greater range, payload, and fuel offload capability. It is primarily for the conventional forces, where the KC-135 with reengining, I think, will provide good refueling capability for our strategic forces. The strategic forces will still be in competition with our total needs. Our total refueling needs are greater than our capability, but in setting priorities for systems we have had to reduce the rate of modernizing the KC-135 and cancel the KC-10.

Senator **Andrews**. The airframe hours in the KC-135 are not as critical as the airframe hours——

General **Jones**. We have been reskinning the KC-135 airframe. We have fairly low hours on our airplanes compared with the airlines because the airlines fly many more hours per day than we do. So we can keep the KC-135's flying for some time. The important thing is to reengine them to get greater effectiveness out of them.

Senator **Andrews**. In the whole field of bomber bases does the military anticipate shutting down a number of bases?

General **Jones**. I don't think the Air Force has made its final decision. As of now, because of the phasing of the bomber force, they do not anticipate any base closures. I think it would be more appropriate to ask the Air Force on that.

Senator **Andrews**. Thank you, Mr. Chairman.

[The information follows:]

AIR BASE CLOSURES

In acquiring the additional strength required to close the "window of vulnerability", we must first redress the most serious weakness in our current forces and at the same time invest in new forces. One facet of enhancing our existing forces is the maintenance of a dispersed bomber basing structure which also provides flexibility for introduction of the B-1 and Advanced Technology Bombers (ATB) in the years ahead. Any premature base closures would not only limit our capability to place the current B-52G/H and Air Launched Cruise Missile (ALCM) forces in the best locations, but may also force us into a base building/opening mode later in the decade.

Frankly, in view of the impending mid and long-term build-up of strategic, tactical and mobility forces, we may have reached the end of the base closures era. As Senator Tower stated in his letter of 15 May 1981, to Secretary Weinberger, "there is just no slack left in the base structure". The small economies to be gained by base closure/reduction actions are more than offset by loss in operational capability, flexibility, and the significant future costs that would be required to build and open bases.

We will continue to review our basing structure in order to provide the greatest efficiency possible. This has always been our goal and did result in base closures during the 1960s and 1970s as the B-47 and older B-52 aircraft retired. Today, any decisions we make must assure maximum flexibility in the posture of our strategic and general purpose forces for the 1980s.

ROLE OF B-1 AFTER ACTIVATION OF ATB

Senator **Stevens**. As I understand the role of the B-1 after the ATB becomes operable, it will be the role of a cruise missile carrier?

General **Jones**. Yes, sir. I have to be careful to state that things don't happen exactly on the same day. The penetration capability does not fall off suddenly. So what I would anticipate is that out in the 1990's some time the ATB would take on the most difficult penetration missions. While some the B-1's might still penetrate into some of the lesser defended areas of the Soviet Union. So you have a shift in the penetration role as opposed to a sharp knife edge at a specific time.

SWING-WING CAPABILITY FOR B-1

Senator **Stevens**. Is the B-1 going to have a swing wing?

General **Jones**. It will have variable sweep; yes, sir.

Senator **Stevens**. When my friend talks about his ABM you will not forget that when I was down in Texas I was told that there was going to be a close vote, fly out and come back. I did and the vote was 50 to 49. I voted for it. The day you opened it, you closed it.

Senator **Andrews**. I did not close it. I thought it was a lot more humane to kill a missile than kill people. I thought the concept of the ABM was a concept this Nation would basically support. The reason for opposing, as I understand it, and I got in the middle of its as you can well understand with the House voting one way and the Senate fighting for awhile. I was on the committee over on the House side, my predecessor was not to happy with the result in the House, but the understanding that I got was that it was closed because it was not cost effective.

You bore that out in what you just said. You said the new updated technology we have now is only 50 percent effective. The story that I was given at that point in time that compelled Congress and members of the subcommittee in the House at that time to go ahead with the closure was the fact that it cost the Russians about one-fourth as much to aim a hundred missiles at that ABM site which if it worked perfectly would overrun it and use it up. Since it lost its cost effectiveness it was wiser to shut it down.

Secretary **Weinberger**. That is my understanding. As I said before, it is one of the few leagues in which a batting average of 500 percent is not enought.

REFINING TECHNOLOGY

Senator **Andrews**. Now you are trying to refine the technology.

Secretary **Weinberger**. Something brand-new, yes, sir. That is exactly what the R. & D. request is for. If we can do that, we would recommend that as one of the ways of insuring ICBM survivability and look at deployment of a BMD system to protect the ICBM silos wherever they then happen to be located.

Senator **Stevens**. Mr. Secretary and gentlemen, we appreciate your coming. I don't see any reason to go into the closed session. The Senators who have specific questions to ask have not been able to come to this session.

We do thank you for your assistance. I want to emphasize again the impact of this on the Senate; however, there is no question that there is a real substantial conflict in the Congress over the B-1. It is gong to be a difficult problem for everyone. If I read the other body it will be even more difficult over there to achieve.

I just hope we don't get involved in an argument over a weapon system that really is nothing more than a hedge. If the B-1 is just a hedge against our ability to develop the ATB then I think we ought to go back and take a look at our space program and find out how they shoot missiles to the Moon.

Secretary **Weinberger**. It is not a hedge at all. It is a coverage during a period of time which we think is extremely vital to have covered. A period of time when we do not believe, at this point that we can guarantee what we will have anything else. It is not a hedge or anything of that type. What we have said before, what we say again, is that we can not be certain that we will have—and we have no reason to suppose that we will—have the new bomber that will be able to penetrate during that period of time and that would therefore leave us without this needed capability for a very vital few years.

It is not a plane whose livelihood ends when you get the new one. It is a plane whose livelihood continues with different missions.

Senator **Stevens**. Thank you very much.

SUBMITTED QUESTIONS

We will submit the questions that were prepared by other Senators for the record, particularly in regard to the closed session. I would appreciate it if we could have your responses.

Secretary **Weinberger**. Thank you. We appreciate the courtesy which you have displayed to us today.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

QUESTIONS SUBMITTED BY SENATOR STEVENS

Budget Justifications

Senator Stevens: Mr. Secretary, as I mentioned earlier, the Committee has only very limited data to back up the President's strategic program budget. Aside from a few paragraphs in the so-called "green book" summary of the September budget amendment, we have a 15-page summary of cost information and that is all.

Now, I am sure the Administration does not really expect the Congress to make critical decisions on the future of our strategic forces and to appropriate $21.5 billion with only this kind of sketchy information. Why don't we have some basic budget justifications? When will we get them?

Answer: We believe that the Highlights of FY 1982 Budget Revisions (With Strategic Program Changes), the various summaries and fact sheets separately provided to the Committee, the information given during the hearings on this subject, and the data being provided for the record in response to other questions will furnish a fully adequate basis for judging the validity of the Department's FY 1982 proposals.

Affordability

Senator Stevens: We must note, Mr. Secretary, that the same budget changes that produced the President's new strategic program also reduced the production level of Air Force tactical aircraft and tactical support aircraft. It also eliminated funding for KC-10 aircraft, and it made substantial reductions in funding previously requested for conventional ammunition. There were cutbacks in military manpower, in fleet modernization, and in many other areas that could be considered a small step back from the improved readiness goals of the March budget. Don't these kinds of change have an impact on the affordability issue of the strategic program?

Answer: The reductions in the Defense program slowed the pace of our overall rearmament program somewhat, but did not seriously impair it. We will still attain the vitally needed improvements in the capabilities and readiness of our forces. We believe the revised program strikes a prudent balance between the strategic program and other areas of Defense effort.

Senator Stevens: Mr. Secretary, you have been using the figure of $180 billion as the 6-year cost of the strategic program: That is in 1982 dollars and even under the optimistic inflation projections of the Administration that is more than $222 billion in actual dollars. But isn't that really just a starting figure? Isn't that bound to go up dramatically even within the 6-year period as we get into ballistic missile defenses and other high technology unknowns?

Answer: We intend to make every effort to keep total strategic program costs within the cost range we have cited.

B-1 Bomber

Senator Stevens: You are projecting a $20 billion program cost for 100 bombers in fiscal year 1982 dollars. How firm and how complete is that estimate?

Answer: We estimate the cost of the B-1B program at $20.5 billion in FY 1981 dollars (including $800 million for modifications related to the cruise missile capability), or approximately $22 billion in FY 1982 dollars. These are the best available estimates. Some adjustments may be in order after contract bids are received and the ongoing Departmental review of these tentative estimates progresses. We will keep the Committee fully informed if this proves to be the case.

NEED FOR AN INTERIM PENETRATOR

Senator Stevens: Many experts question the need for an interim penetrator, which is the primary mission for the B-1 in the late 1980's. If one makes a judgment that the B-1 is not needed as a penetrator, can the production of this aircraft still be justified?

Answer: The primary mission of the B-1B is not that of an "interim penetrator." The B-1B, as directed by the Congress, will be an effective "multirole bomber" capable of delivering nuclear weapons into the Soviet heartland well into the 1990s and with the ability to perform as a cruise missile carrier and conventional bomber well into the next century.

Thus, the B-1B has the inherent flexibility to provide a wide range of vitally needed capabilities beyond that of strictly a penetrator role: cruise missile carrier, theater conventional and nuclear delivery system, worldwide force projection weapon system, and maritime support system. In contrast to the notion of an "interim penetrator", we anticipate that the B-1B will provide a significant and long-term contribution to our deterrent forces well beyond the year 2000.

FOREGO B-1 AND DEVELOP A MODERN CRUISE MISSILE LAUNCHER

Senator Stevens: How seriously did the Department consider foregoing a B-1 and turning instead to development of a modern Cruise Missile launcher to replace the B-52 fleet eventually? Couldn't we build Cruise Missile launching aircraft at a fraction of the cost of the sophisticated B-1B?

Answer: The Air Force has investigated numerous candidates for the role of a cruise missile carrier aircraft (CMCA). The Air Force Aeronautical Systems Division carried out an extensive analysis of comparative life cycle cost effectiveness of a wide range of military and commercial aircraft in the CMCA role.

The study essentially concluded that commercial aircraft were not good choices for the CMCA role due to the costs and difficulties of meeting nuclear hardening and base escape requirements as well as their limitation to a single mission and their resultant inherent inability to adapt to unforeseen threats or circumstances.

Such an aircraft most definitely would not have been able to satisfy the Congressional mandate spelled out in the FY 81 Authorization Act for a strategic multirole bomber capable of performing the missions of conventional bomber, cruise missile launch platform, and nuclear weapons delivery system in both the tactical and strategic role.

UPGRADED FB-111 AS AN INTERIM PENETRATOR

Senator Stevens: If the judgement is made that an interim penetrator is essential to the nation's defense, wouldn't the upgraded FB-111 offer a much faster and cheaper interim answer?

Answer: The judgment has been made that an interim penetrator would not be a cost-effective approach to bolstering the nation's defense. The consensus of the Congress as laid down in the FY 81 Authorization Act and then later supported by the Reagan Administration is that what is needed is a capable multirole bomber which can penetrate Soviet defenses, carry cruise missiles, project force worldwide, serve as a theater conventional and nuclear delivery system, and provide maritime support.

The FB-111, while perhaps providing some near-term capability, is extremely limited in range, payload, and growth potential and therefore lacks the flexibility for long-term utility required in a new strategic bomber aircraft. It is not suitable as an effective cruise missile carrier aircraft; thus a new CMCA would eventually be required to replace retiring B-52s in that role. In addition, B-52s would need to be retained longer, significantly increasing costs to accommodate modification requirements. Thus, the FB-111 B/C clearly would be a very limited and expensive interim solution to our defense needs.

IS THE IOC TARGET A REALISTIC ONE

Senator Stevens: Recognizing the delays that have already occurred in the B-1B program because of the lateness of the Presidential decision and the current stalemate over 1982 defense funding, is the 1986 initial operating capability target a realistic one?

Answer: There is no question that the developmental pace and the resulting IOC are to a large degree dictated by front end program funding. The 1986 IOC is, however, consistent with our funding priorities and our technical/ engineering capabilities. The 1986 IOC can be achieved given prompt approval of the FY 82 development and production funding.

CHANGE IOC TARGET DATE FROM FY TO CY

Senator Stevens: We note that the IOC target date has been changed from the 1986 fiscal year to calendar 1986. Just what month in 1986 is the actual IOC target now?

Answer: The exact IOC is very time-sensitive to delays in funding. However, despite the delays experienced with the release of the B-1B FY82 defense funding to date and the attendant time-compression problems resulting from those delays, the Air Force is confident that we can achieve the B-1B IOC in 1986.

ANOTHER YEAR AFTER IOC TO ACHIEVE COMBAT READINESS

Senator Stevens: Isn't it true that a 1986 IOC still does not provide a bomber with combat capability? Isn't it going to take at least another year after the IOC is achieved before the first squadron achieves the necessary combat readiness?

Answer: The IOC for the B-1B is defined as a scheduling milestone when a total of 15 B-1Bs will have been delivered to the

Strategic Air Command. At that time, the squadron would be capable of standing SIOP alert duty.

At B-1B IOC, the aircraft will be fully certified for two nuclear weapons (SRAM and B-61) and two conventional weapons (MK-82 and MK-84). The remaining weapons certification will be conducted by the using command at the first operational base.

100 B-1B'S IMPEDE DEVELOPMENT OF STEALTH

Senator Stevens: Can you assure this Committee and the Congress that the decision to produce 100 B-1B bombers would not impede the concurrent development of the advance technology bomber (Stealth)?

Answer: The acquisition of the near term B-1B should not impede the development of an Advanced Technology Bomber (ATB). In terms of funding, the phasing of the B-1B and ATB is such that they do not seriously compete for R&D or procurement monies during their acquisition cycle. Operationally, the B-1B multirole bomber has the inherent flexibility to complement the penetration role of the ATB well into the next century.

Our present assessment, therefore, is that we must build the B-1B in the near term and continue to fund a stealth bomber development effort at the fastest, prudent risk pace considering the technological risks and cost uncertainties attendant with this high technology program.

BOTH SYSTEMS COMPETING FOR SAME DOLLARS

Senator Stevens: Wouldn't both of these systems be competing for heavy dollar inputs at about the same time?

Answer. The phasing of the B-1B and the Advanced Technology Bomber (ATB) are such that neither system adversely impacts the other. The large research and development outlays for the ATB occur during the latter production period and the initial deployment phases of the B-1B. Large ATB procurement outlays occur well after the B-1B is operational.

Both systems compete with the inefficient, aging B-52 fleet. We plan to phase out our oldest B-52, the Ds, in the near term, and the later models, the Gs and Hs, will be phased out as the newer systems come on to replace them.

B-1 Bomber

Senator Stevens: What if severe cost escalation is encountered in the B-1B program while the country continues to face serious economic problems? In a tight budget squeeze, how could you or future Secretaries of Defense feel confident that both bomber programs could be fully funded?

Answer: We are confident that the B-1B program can avoid such difficulties. It should be noted that the bulk of the research and development necessary for this weapon system has already been accomplished, and prototype airframes have in fact been built. Developmental risk -- a prime source of overruns -- is therefore minimal for this program.

PRODUCTION CONTRACT FOR INITIAL B-1 BUY

Senator Stevens: What kind of a production contract is planned for the initial B-1 buy? Is it a straight fixed cost contract?

Answer: The production contract for the B-1B will be a fixed-price incentive fee contract.

FUNDING REQUIRED TO ESTABLISH PRODUCTION FACILITIES

Senator Stevens: How much funding is required simply to establish the necessary production facilities?

Answer: Rockwell International is proposing to build a final assembly building, a checkout building, and an office building, at Palmdale, CA.

There are production facility improvements which will have to be done to get the Columbus, OH plant ready. There are similar refurbishment expenses needed to get other Air Force facilities ready for a major aircraft production program. Rockwell International is investing in excess of $400M for this effort; estimates for the Air Force contribution are close to $70 Million (TY$). This account is funded in the Industrial Preparedness Program Element.

NECESSARY CONSTRUCTION FOR THE FB-111 UPGRADE

Senator Stevens: Would that kind of construction be necessary, say, for the upgraded FB-111?

Answer: The facilities at Air Force Plant Number Four at General Dynamics in Fort Worth would have required expanded capabilities for the FB-111 B/C production. This plant has some 307,200 square feet of available floor space, but it is split into two separate approximately equal areas. The Air Force evaluated this floor space for either the FB-111 B/C or the B-1B and determined that it was not adequate.

Contract negotiations similar to the B-1B for the FB-111 B/C, however, are not ongoing, therefore, comparable production facility costs are not available.

Interim Nature of Silo Deployment

Senator Stevens: Is that really a cost effective proposal, Mr. Secretary? Aren't we running the danger of lavishing between $5 and $6 billion on hardened silos that may well be obsolete before they are operational?

Answer: We are fully convinced that our interim silo deployment plan is cost effective in view of the following facts that are independent of and in addition to survivability considerations. Initial deployment in silos will avoid any delay in deploying M-X, which has a much larger payload and greater accuracy than current Minuteman missiles. In addition, early deployment of M-X in silos will help focus future Soviet ICBM investment on survivability rather than modernization or expansion. Their silo-based forces would no longer be able to threaten U.S. ICBMs with impunity. Having an active production line for M-X will also give us the capability to respond to further expansion in Soviet ICBM forces with rapid, emergency deployments of our own. We currently are not able to do this. The limited silo deployment of the M-X, combined with the production program for 100 missiles, serves this purpose.

LONG-TERM OPTION FOR M-X BASING

Senator Stevens: I understand the plan is to select a long-term option for M-X basing by late 1984. What kind of an initial operating capability target do you have for this long-term basing system, whatever it might be?

Answer: The initial operating capability (IOC) for long-term basing for M-X is dependent upon the mode selected in 1984. Deep Basing or Ballistic Missile Defense could have an IOC in the late 1980's while Continuous Patrol Aircraft could have an IOC in the early 1990's.

SPENDING LIMITATION BUILT INTO THESE SCENARIOS

Senator Stevens: At what additional cost? Do you have any kind of spending limitation built into any of these scenarios?

Answer: Although the Air Force has not been given detailed by-year spending limitations for research and development of long-term options, OSD has provided funding guidelines from which to work. Funding profiles established by the Air Force are within these guidelines.

1986 AVAILABILITY TARGET FOR THE M-X MISSILE

Senator Stevens: Is that 1986 availability target for the M-X missile still attainable? Have you lost any ground during the long period of uncertainty over M-X funding?

Answer: To date we have not lost ground in missile development. The missile is still on schedule to meet a 1986 deployment.

THREE YEAR PERIOD A PRACTICAL AND ATTAINABLE PROGRAM

Senator Stevens: Is a three year period of concurrent development and production a practical and attainable program?

Answer: All previous ballistic missile systems have required a large amount of concurrency in their development. The M-X missile program will require a period of concurrency which is actually less than typical. Specifically, a production decision will not be required until six months after the first test flight. The M-X missile program has been on schedule and we anticipate only minimal risk in a production decision.

BREAK DOWN AMONG MISSILE, BASING AND LONG-TERM OPTIONS

Senator Stevens: Nearly all of the $1.9 billion request for 1982 M-X work is in research and development. You are also budgeting heavily in the out years on R&D. How does that break down among missile, basing, and long-term options?

Answer: The M-X research and development program for silo deployment is approximately $9.0 billion in constant FY 82 dollars. This includes $7.1 billion for missile development and $1.9 billion for development of the basing requirements.

Approximately $750 million has been allocated by the Air force to do research and development on long term options in FY 82 - FY 84. These initial efforts will determine the funds required from FY 85 and on, to support a long-term option decision.

BUDGET JUSTIFICATIONS FOR M-X PROGRAM

Senator Stevens: When will you be able to deliver budget justifications for the specifics of the M-X program?

Answer: Detailed budget requirements will be available approximately 45 days after a decision is made on whether to pursue deployment of M-X in either Titan or Minuteman silos.

MINUTEMAN EXTENDED SURVIVABLE POWER PROGRAM

Senator Stevens Why are you cancelling out all the Minuteman improvements, particularly the extended survivable power program? Isn't survivable power even more critical if we go to hardened silos for MX?

ANSWER. Not all Minuteman improvement programs are being cancelled. We are continuing deployment of the new, higher yield MK12A reentry vehicle and are continuing the connectivity upgrade in the Command, Control, Communications (C^3) Integration program.

The Minuteman Extended Survivable Power (MESP) and the Airborne Launch Control System (ALCS) Phase III programs are being cancelled as part of the overall Defense budget reduction. We continue to believe that these upgrades would provide desirable, new capabilities for Minuteman, but we are unable to fund all of our improvements while reducing the budget and modernizing our strategic forces.

The M-X in hardened silos must be recognized as a near term solution. Its value rests in the substantially increased uncertainty in the Soviet planner's mind and in the increased offensive capability against prompt, hardened targets. But given the somewhat marginal utility in absolute terms of survivability and endurance, the added cost of a survivable power system does not appear to be warranted.

LONG-TERM OPTIONS FOR M-X

Senator Stevens: You list as long-term options the air launched M-X or the deep silo. Both those alternatives have been sharply criticized even among Air Force experts. What is the current Air Force assessment of these options?

Answer: Earlier assessments of an air launched M-X option found the concept feasible but costly with survivability called into question. The Continuous Patrol Aircraft concept differs in its approach to cost and survivability — this has led to a reassessment of an airborne launch for ICBMs. Survivability, safety and cost concerns still exist. It will take additional study to determine if the Continuous Patrol concept should be pursued.

Deep Silo is somewhat of a misnomer for what the President announced as a Deep Basing concept. In the past Deep Basing has been thought to be survivable, but lacking quick reaction because of long egress times.

Deep Basing does have some merit as a way to maintain a survivable secure reserve force. Issues such as life support, survivable power, launcher egress, and siting will be explored through 1984 to allow for a decision on further development at that time.

TRIDENT II

Senator Stevens: The new program centers on development of the D-5 or TRIDENT II missile, but it appears from the few figures we have now available that the missile also is being slowed. There is no change in the 1982 program, and while R&D goes up $18 million in 1983, procurement is reduced $78 million. Why this stretch-out?

Answer: The reduction in FY 1983 procurement funding does not reflect a slow down or stretch-out of the TRIDENT II (D-5) procurement program. This adjustment is a reduction to the Weapons Procurement, Navy (WP) TRIDENT I (C-4) Missile requirement resulting from the reduced inventory objective for TRIDENT I missiles due to the recent TRIDENT II deployment decision.

Senator Stevens. With full scale procurement beginning in fiscal year 1987, what is the target for having the D-5 missile operational? How firm is that IOC?

Answer. The planning date for the TRIDENT II IOC is (deleted). This date was predicated on receiving requested funding. To date, we are still awaiting the pending reprogramming action (DD-1415) for $32.9 million of FY 1981 RDT&EN and are now operating on a continuing resolution awaiting approval of the $198.9 million requested level in the President's budget. This lack of funding is presently causing us to delete or dilute some technical approaches to the D-5 performance parameters. The (d) IOC is still achievable but with increased risk in achieving the desired performance levels.

Comparison of D-5 and M-X

Senator Stevens: How will the accuracy and yield of the D-5 compare to that of the M-X?

Answer: The Trident II D-5 accuracy goal is a (d) CEP at 4000 nautical miles. The baseline warheads planned are the (deleted) Mk 4 reentry vehicle for soft targets and a (deleted) reentry vehicle for hard targets. The M-X accuracy goal is 450 ft CEP at 5800 nautical miles. Two possible warheads include the (deleted) Mk 12A reentry vehicle and the (deleted) Advanced Ballistic Reentry Vehicle (ABRV).

ABRES - ADDITION OF $51M

Senator Stevens: Secretary, what is the Department's position on the proposed addition of $51 million to the pending Defense authorization bill for the Advanced Ballistic Reentry Systems (ABRES)? And why was this program apparently underfunded in the President's budget?

ANSWER. The Department does not now support the HASC's addition of $51M for ABRES in FY 82. ABRES, now included in the Advanced Strategic Missile Systems (ASMS) program, has nearly completed several of its largest reentry system advanced development projects in FY 81 and will not require these additional funds (beyond the $49M requested).

Under the new ASMS scope, several advanced missile, basing and sub-system development initiatives are being considered in current Air Force studies and program planning, in addition to reentry systems work. Until this planning and programming is completed, it appears premature to dedicate scarce resources to additional funding for ASMS.

Significance of BMD

Senator Stevens. How serious is this ballistic missile defense portion of the program? What are the specific research goals and when do you anticipate being able to come up with a decision on a definite hardware program?

Answer. (Deleted.)

(Deleted) the Army's decision in CY 84 and a subsequent (deleted). Under President Reagan's strategic modernization plan the BMD program will experience some conceptual changes due to termination of the multiple protective shelter (MPS) basing scheme for MX. The LoAD R&D program will be restructured from a pre-prototype demonstration program to an accelerated development effort in order to support the 1984 deployment decision. Should a decision be made to deploy BMD, full-scale engineering development could commence in (deleted).

The LoAD program will address specific system development issues to support the 1984 deployment decision. These issues include operation in a nuclear environment, deceptive basing, defense engagement performance, development and deployment schedules, system cost, environmental impact, organizational and operational concepts, and arms control implications.

Senator Stevens: There are no changes at all, according to these numbers, on the $3.9 billion budgeted for other strategic defenses. Have you reshaped the program? Please give us some details on the spending and on the program objectives.

Answer: We have virtually ignored strategic defensive systems for over a decade. As a result, we have large gaps in the North American air defense warning network; our strategic air defense interceptors are obsolete; and our anti-satellite and ballistic missile defense programs have lagged behind the Soviets. The Reagan program ends these years of neglect.

We plan to upgrade, in coordination with Canada, the North American air surveillance network to warn against surprise bomber and cruise missile attacks. The plan includes some combination of new over-the-horizon backscatter (OTH-B) radars and improved versions of the ground radars that exist today.

We will replace five squadrons of aging F-106 interceptors with new F-15s. Although we eliminated long-lead funding in the FY82 budget when we reduced FY83 procurement from 42 to 30 to satisfy budget cuts, we will still be able to complete this modernization by FY86.

We have increased BMD R&D funding to support the long-term ground-based option for MX.

We will continue to pursue an operational anti-satellite system, and we are improving our ability to monitor space satellites.

A portion of the $3.9 billion for strategic defense is to operate and maintain existing air and space surveillance systems, and air defense interceptors, bases, and headquarters.

Strategic Defense

Senator Stevens: Can you tell us how the strategic defense funding is allocated among the principal programs?

Answer:

	Total Obligational Authority (Dollars in Billions)
Air Surveillance	.6
Interceptor Operations	.4
Procure F-15s	1.3
Ballistic Missile Defense	.6
Space Defense	.3
Other Operations	.7
	3.9

STRATEGIC C3 PROGRAM FOR FY 1982

Senator Stevens: Mr. Secretary, your statement gives considerable emphasis to the build-up in our communications and control system, and everyone does indeed recognize we have serious deficiencies in this area. However, no additional funding is proposed for the $2.1 billion program for C3 in the March budget, and there is no significant out-year increase until 1986-87. Are you saying that the present budget is the highest effective spending level for this area?

Answer: That March amendment to the FY 1982 budget request included additions to the January submission in the amount of $300 million for strategic C3 programs. These additions represented initiatives to correct some of the most evident deficiencies. Since that time, we have conducted a thorough review to develop a comprehensive set of programmatic initiatives, both to correct deficiencies in the current system and to provide new functional capabilities needed to meet strategic policy requirements. These initiatives will impact significantly on the FY 1983 budget request. In a closely related area, the September amendment to the FY 1982 budget request includes an additional $90 million for satellite communications programs. Thus, the current request represents an increase of $390 million over the January submission in areas pertaining to strategic C3.

STRATEGIC PROGRAM FY 82

Senator Stevens: Part of the strategic program was a decision to go ahead with a limited extremely low frequency communication program for submarines. How was this initiative accommodated within the existing budget? How much is intended for this effort and what is the source of the funding?

Answer: Program Element 11401N, Extremely Low Frequency (ELF) Communications, has a FY 82 budget of $34.9 million. This amount is sufficient for the research and development needed in FY 82 in support of the Presidential decision to proceed with an ELF communications system having transmitters in Michigan and Wisconsin and receivers on all submarines. An additional $196.1 million is needed in FY 83-FY 87 to complete the program and accomplish an initial operating capability in 1985, and final operating capability in 1987.

Senator Stevens: It is unclear from the information submitted to date how much of the radar warning system is funded under C3 and strategic defenses. There appears to be some overlap. When can we have specific funding details and justifications for these important programs?

Answer: The majority of the radar warning systems are annually reported to the Congress and justified both individually and collectively in the Tactical Intelligence and Related Activities Congressional Justification Book. This documentatation is forwarded in January to support the President's Budget submission, together with Descriptive Summaries on all programs. The following TIARA programs are accounted for under the DoD Strategic C3 mission area:

Missile Warning

Ballistic Missile Early Warning System (BMEWS)
SLBM Radar Warning System - including PAVE PAWS, FPS-85, FSS-7 radars
Perimeter Acquisition Radar Attack Characterization System (PARCS)

Aerodynamic Threat Warning

Distant Early Warning (DEW) Radars - Including the Enhanced DEW
CONUS Over-the-Horizon Backscatter (OTH-B) Radar

Space Surveillance and Warning

SPACETRACK
NAVSPASUR

In addition to the above there are three relevant non-TIARA radar programs accounted for under the DoD Strategic Defense mission area. These are:

Aerodynamic Threat Warning

Joint Surveillance System (JSS)
Alaskan Air Command radars (SEEK IGLOO)
CADIN PINETREE - A Canadian system partially supported by US

A system-of-systems analysis and justification of the tactical warning sensors responsive to the ICBM/SLBM threat to CONUS are contained in the OSD Master Plan for Ballistic Missile Tactical Warning and Attack Assessment forwarded to Congress on March 31, 1980. We are continuing to pursue the prioritized initiatives of that plan. A similar system-of-systems plan for North American Air Defense will be available to the Congress by January 20, 1982.

NUCLEAR MATERIALS

Senator Stevens: The U.S. is embarking on a major strategic force modernization program. Will we have sufficient fissionable materials to support this program? Will it be necessary to build an additional weapons-grade nuclear reactor?

Answer: Our current supply-demand estimate of special nuclear materials projects (deleted). One means of increasing production of plutonium and tritium would be an additional reactor. However, it would be about ten years before we would expect a new ractor to be operational. Another means of increasing the supply of weapon grade plutonium in the mid-term would be the construction of a special isotope separation facility. These options are being evaluated, but no decision has yet been made.

Senator Stevens: What is the most urgent strategic C3 need that we have:

- surveillance and warning
- command and control
- strategic communications

Should we be seeking to improve systems responsiveness and system endurance? Why endurance?

Answer: Our most urgent need is that the composite efforts of all three areas work together reliably on an end-to-end basis. That is, the sensor systems, the means for decision-making and subsequent communications of direction to the forces and their individual improvement programs all must be placed in a proper mutual balance as well as in balance with the forces. Our program in these areas will first correct those deficiencies that pertain to reliability and survivability of the most essential strategic C3 functions on an end-to-end basis. Some of these initiatives will also contribute to endurance. Responsiveness is a key item in several of our initiatives as we must be able to improve our assessment and characterization of the attack and also (deleted).

Similar needs for better responsiveness apply to communications to our land-based and submarine missile forces.

Endurance is an unqualified need for our total force posture. Our C3 should be able to survive throughout the period of transition to nuclear war, and through the period of nuclear conflict, which may be protracted, to termination.

PAVE PAWS SLBM

Senator Stevens: Why do we need new PAVE PAWS SLBM radar warning sites in the southeastern and southwestern United States? Do coverage gaps currently exist in these areas?

ANSWER. Serious coverage gaps do exist in the ocean areas to the Southeast and Southwest of the US. From these areas, the entire US can be targeted by SLBMs and, more importantly, they can be launched totally undetected by radar sensors. Attached is a diagram showing the areas where SLBM radar coverage does not exist.

(NOTE: The diagram showing areas of nonexistent SLBM radar coverage is classified SECRET.)

EC-135 HARDENING

Senator Stevens: Why should EC-135 Airborne Command Posts be hardened against EMP?

ANSWER: Airborne Command Posts are the most survivable command and control facilities due to their inherent mobility. Although this mobility provides protection from direct targeting, it does not provide protection from other more wide-spread effects of nuclear weapons.

One of the many effects of the detonation of a nuclear weapon is the generation of a strong electromagnetic pulse (EMP) over large areas. This pulse causes both damage and upset to electronic equipment. (Deleted.)

Hardening the EC-135 Airborne Command Posts against EMP will help to insure that a viable command and control facility will not only survive a nuclear attack but be capable of communicating direction to nuclear capable forces in the trans-attack and post-attack time frames.

Senator Stevens: What is the role of NAVSTAR and the Integrated Operational Nuclear Detection System (IONDS) to the improvement of U.S. sensor/warning capabilities?

Answer: IONDS sensors installed on GPS satellites will greatly increase our capability (deleted).

(Deleted) capability includes: (a) nuclear test ban monitoring; (b) nuclear proliferation detection; (deleted).

The system will also provide quasi-realtime nuclear trans- and post-attack strike and damage assessment information to the NCA in a nuclear war, regardless of the location of conflict. (Deleted.)

LEASAT

Senator Stevens: Can LEASAT serve the strategic and SIOP functions needed for use in a nuclear environment?

ANSWER: While LEASAT is cost effective and necessary to help alleviate satellite channel requirements, it is not hardened against nuclear effects and is not equipped to support the Strategic and SIOP functions in a hostile nuclear environment. Today, DOD is served by two UHF satellites: FLTSAT and GAPFILLER. GAPFILLER is currently five years old and is not expected to provide its current level of useful service beyond 1983. When LEASAT is successfully launched in the Shuttle (about 1984), it will provide the additional UHF satellite capacity including that now being handled by GAPFILLER.

Senator Stevens: Why should the U.S. buy and launch three more FLTSATCOM/AFSATCOM satellites?

ANSWER: Four FLTSAT satellites are presently in orbit and providing service. The first will begin to exceed the original design life of 5 years in FEB 1983. Due to a lower than predicted number of component failures expected satellite service life is now estimated at 6 years. Three FLTSATCOM/AFSATCOM satellites are needed as replacements to protect the military essential hardened UHF satellite constellation continuity and permit AFSATCOM strategic connectivity until MILSTAR is fully deployed in the mid-1990's. At the present time validated JCS UHF requirements exceed current FLTSAT capacity. Only FLTSAT has channels capable of supporting the Single Integrated Operations Plan (AFSATCOM) and nuclear capable forces and is hardened against electromagnetic pulse. At the same time we are faced with the need to continue UHF satellite service for the present and foreseeable future because of the large DOD population of UHF users in operation today and the resulting terminal investment. The most cost effective method for continuing to meet DOD essential nuclear hardened communications requirements and provide a strategic connectivity is a follow on program of LEASATs and FLTSATs. The FLTSAT program provides a minimum risk platform with known capabilities.

Senator Stevens: What kind of improvements to existing communications will a new generation, multi-mission satellite for extremely high frequency (EHF) packages provide the services?

ANSWER: Extremely high frequency has distinct advantages over the existing UHF satellite system. Due to the large bandwidth, EHF coupled with a spread spectrum modem can provide an anti-jam capability that is not possible with UHF satellites. The EHF narrow beamwidth results in a low-probability-of-intercept (LPI) signal. The new multi-mission satellites will be hardened against nuclear effects and possess both maneuverable and autonomous operation characteristics. A further military advantage is gained by use of crosslinks between satellites reducing the dependence on ground-based control stations. Inherent therefore is the ability to provide enduring connectivity during the trans and post SIOP period and a report back capability for the SIOP forces. The Navy's SATCOM EHF Transition Package will provide an EHF test platform for all services and an initial operational anti-jam, low-probability-of-intercept communications capability for the National Command Authorities (NCA). FLTSAT 7 and 8 are scheduled as host satellites for the Navy EHF SATCOM Transition Package. The design of the FLTSATCOM satellite will serve these unique needs until the planned EHF MILSTAR system is fully deployed in the mid-1990's.

IMPROVEMENTS TO MEECN

Senator Stevens: Why are improvements to the minimum essential emergency communications system (MEECN) program necessary? What capabilities will a new VLF/LF miniature receiver provide the U.S. bomber force and airborne command post aircraft?

ANSWER: The Minimum Essential Emergency Communications Network is an evolving system consisting of communications links (deleted). Improvements are necessary to overcome deficiencies in SIOP connectivity which develop as the threat increases in severity.

(Deleted.)

(Deleted.)

We currently have survivable very-low-frequency/low-frequency transmission and reception systems on the E-4 National Emergency Airborne Command Post aircraft and on EC-135 World-Wide Airborne Command Post aircraft. No additional receivers are required for these systems.

Installation of receivers on bombers, however, would permit direct reception of messages transmitted by the E-4 and EC-135 aircraft. The potential contribution of these receivers has been analyzed. The results show that the receivers will assure almost (deleted).

This acquisition has the highest DOD priority rating that the Air Force can apply to a project.

Worldwide Military Command and Control System (WWMCCS)

Senator Stevens: The revised FY 1982 budget deletes funding for enhanced post-attack WWMCCS efforts, particularly the Reconstitutable and Enduring Satellite Communications and Ground Mobile Command Centers. What year will these programs be restored in the out-years of the five-year plan?

Answer: Some funding for the ground mobile command center is included in the FY 82 budget. Because the operational concept for a reconstitutable satellite has not yet been developed and because our study to define the total survivable, enduring C^3 system is not yet complete, funding initially earmarked for RESC has been applied to the more mature, higher priority EHF satellite program. We expect to complete the studies on survivable, enduring C^3 and weapons systems by early summer 1982. If the need for a UHF reconstitutable satellite system to fill a communications gap develops from these studies, funding to support such a program will then be identified. Funds have been included beginning in FY 84 to enhance existing and develop new space segments for the survivable, enduring C^3 system.

Senator Stevens: What operational problems is the WWMCCS Automated Data Processing program having?

Answer: The primary ADP hardware in WWMCCS command centers, i.e., H6000 series CPUs, was procured beginning in 1970. This computer design was introduced in the early 1960s. Since that time, ADP architecture and design have evolved through several generations, each with improved and expanded capabilities. The new series of machines representing each new ADP generation have rather quickly replaced the older versions. Retaining these older machines becomes economically unattractive because of a lack of spare parts, higher maintenance costs, and a lack of personnel trained to maintain the hardware and system software.

The escalating cost of maintaining older generation machines has been a continuing problem in commercial practice and will also apply to the present Honeywell CPUs in WWMCCS. The current expectation is that in 10-15 years there will be few, if any, H6000s left in commercial service. The present Honeywell contract for maintenance and support of existing WWMCCS hardware and system software was signed in June 1980 and is effective for eight years; at that time, steeply rising H6000 maintenance costs are inevitable.

In short, rapid advances in ADP technology and architecture have created a situation in which the current H6000 hardware and system software badly lag the state-of-the art and commercial practice and are expected to be very difficult and expensive to support logistically within 10-15 years.

As noted earlier, upgrades have been made to both the H6000 hardware and system software over the past 5-10 years in order to satisfy growing user needs and overcome existing problems. Computer peripherals have been upgraded and other improvements made. Nevertheless, system users generally identify the following equipment limitations for early modernization attention:

- o reliability and availability of support equipment (power, air conditioning) and computer peripherals,
- o computing capacity, and
- o flexibility in equipment selection, particularly work station equipment.

Another facet of the problem is that the WWMCCS Information System (WIS) is being called upon to play a growing, more critical role in a wide range of WWMCCS operations. This requires more ADP capacity and capability.

In the software area, problems requiring attention include:

- o inadequate on-line software development and data management tools (offered by the system software),
- o major deficiencies in current applications software, and
- o limited range of standard applications software.

Modernization targets bridging hardware and software include:

- o WWMCCS Intercomputer Network performance,
- o man-machine interface deficiencies (i.e., need for "friendly" terminals),
- o inadequate fault isolation aids (software and hardware), and
- o very constraining security procedures (there is no multi-level security system in WWMCCS ADP and WIN operates at a level of Top Secret, requiring appropriate security measures for all associated terminals and personnel).

Consequently, a major modernization and enhancement of the current WWMCCS ADP and the entire WIS, including the basic information reporting system and its procedures, will be required over the next ten years to meet national priorities for situation assessment, crisis operations and rapid deployment and support of military forces worldwide. Modernization of the ADP hardware alone will not be sufficient to provide the capabilities required for the wide range of WWMCCS functions. Redesign and modernization of the major applications software which supports a broad range of functions and users are essential.

Senator Stevens: Have functional requirements for military commanders who rely on WWMCCS been clearly defined?

Answer: Yes, the JCS Concept of Operations for Post-1985 clearly identifies functional requirements that WWMCCS ADP must support:

a. Functional Tasks. The ADP system will provide capabilities for data acquisition, storage, processing, and display to support decisionmakers, their staffs, and subordinates in carrying out the following functions:

(1) Monitor the current situation including the status of US and non-US forces. Improve the capability to perceive changes in the current situation, as well as the status and readiness of weapon systems and forces, through enhancement of data reporting, processing, communications, display, and ad hoc query/response capabilities and interfaces.

(2) Formulate responses to warning and threat assessment. Improve the capability to provide warning and

support assessment of strategic and tactical warning and threat information by developing standard data processing applications and displaying operational and intelligence information.

(3) Select options, deploy/employ forces, and implement operation plans. Improve the capability to support the development of operations plans and courses of action in support of deployment planning, mobilization, movement monitoring, execution planning, execution, force alerts, employment, sustainment, and redeployment over a wide range of alternatives. Presentation of information will include response to ad hoc queries, interactive teleconferencing, group display for decisionmaking, and secure ADP graphics conferencing. Support the preparation and transmission of decisions, commanders' estimates, and warning, alert, operation, and execute orders.

(4) Perform attack, strike and damage assessments, and residual capability assessment. Improve the capability to support force execution monitoring and assessment of the damage resulting from enemy attack, friendly strikes, and determination of residual capabilities.

(5) Reconstitute and redirect forces. Improve the capability to provide standard status information on location, condition, and availability of resources held in reserve or reconstituted during and after hostilities or other operations. The use of airborne and deployable ADP systems for improved survivability should be considered.

(6) Terminate hostilities and active operations. Support the expeditious termination of hostilities and active force operations. Improve the capability to monitor current force activity and estimate its effects on enemy capabilities. Assess and monitor US force actions in achieving a directed recovery posture.

b. Levels of Conflict. The WWMCCS ADP system will support authorized users at all force posture levels during the following levels of conflict:

(1) Day-to-day operations.

(2) Crisis actions.

(3) Application of conventional and limited nuclear forces.

(4) Transattack in general nuclear war environment.

(5) Postnuclear attack including reconstitution.

Service-directed requirements collection teams have now visited the major WWMCCS sites to collect operational information requirements by functional family. These requirements provide the basis for defining the new applications software which will allow the WWMCCS Information System (WIS) to provide on-line, interactive capabilities needed for crises support. New hardware alone will not provide this.

The operational information requirements also provide the foundation for redesigning reporting procedures, another key ingredient for effective WIS support to WWMCCS. Two Joint Reporting Structure (JRS) modernizaton efforts are now underway.

Redesign of the family applications software and the related reporting procedure, and selection of new hardware to support it is Phase III of the modernization effort. This may take up to six years before it impacts WWMCCS sites. Modernization Phases I and II are more near-term and address enhancements and upgrades to the current baseline system, and user support and improved connnectivity, respectively. Both of these phases are based on firm requirements.

The site visits have defined the Phase I baseline enhancements needed by site to provide adequate performance in the interim before the new family processors are installed. These enhancements include increased memory capacity, better peripherals and WWMCCS Intercomputer Network upgrades. This selective upgrading will improve WIS performance on those critical areas where it is needed without the high cost or low efficiency of system-wide H6000 replacement. The Five Year Defense Plan reflects these enhancements.

The Phase II requirements are defined in a Multiple Required Operational Capability (MROC) co-authored by CINCPAC and CINCEUR. This document has been coordinated by the major theater commands, and is currently being approved by the Services and OJCS. This document clearly, and in great detail, states the commands' needs for Phase II capabilities such as enhanced user support, H6000 connectivity, automated message handling, access to other WIS sites and user connectivity to all WIS resources through a local network.

Senator Stevens: Is WWMCCS software suitable for a potential wartime environment?

Answer: The software developed for the WWMCCS Standard ADP System is considered suitable for the support of our military commands in a limited, conventional, or post-nuclear attack environment. The limiting factor in a wartime environment is not the software but the survivability of computer facilities and supporting communications systems.

Past exercises demonstrated we needed to improve our ability to plan and monitor the execution of a major force mobilization and deployment. As a result, the Joint Deployment Agency was formed, and new WWMCCS software, the Joint Deployment System (JDS) was developed. The JDS has been tested during JCS Exercises over the past 1 1/2 years with very successful results. The JDS has provided WWMCCS commands with more timely information on force deployment in a wartime environment than ever before. This system is being continually evaluated and improved to meet the requirements of the deployment community.

Senator Stevens: Is the WWMCCS ADP program being managed in a cost effective manner?

Answer: Yes, we are managing the WWMCCS ADP in a cost-effective manner. As we begin the transition of the current WWMCCS ADP system to the WWMCCS Information System (WIS) we have designated a joint program management structure to control both the WIS modernization process and the near term enhancements to the existing system. The Joint Program Manager (JPM) will control the funds necessary for WIS development and will ensure effective life cycle management of the program. The JPM will be a single focal point for WIS matters as Executive Agent of the JCS.

NORAD/CHEYENNE MOUNTAIN COMPLEX ADP

Senator Stevens: Do WWMCCS hardware and software meet North American Air Defense Command (NORAD) mission requirements? Has a suitable replacement for the CSS Honeywell computer been found? Is exemption from the WWMCCS standard being considered to preclude the recurrence of past problems, and enable NORAD to meet its mission requirement?

Answer: The present NORAD requirements have been satisified with the existing WWMCCS hardware and software. However, to meet these requirements extensive modification to the Honeywell software was mandatory. As a result, the software that supports the NORAD Cheyenne Mountain Complex (NCMC) is unique, and requires significant revision to accommodate minor changes in NCMC, user, or sensor configuration. This software complexity has seriously constrained the overall processing capability, flexibility, and growth potential for the NCMC.

Computer hardware that can perform message "front end" processing is currently available. However, the overall systems architecture -- the selection of the most suitable technology and hardware configuration to support the specific requirements of the NCMC CSS replacement -- is not yet fully defined. The first phase in acquisition of the CSS replacement will be an FY 82-83 contractor concept definition effort to determine the appropriate architecture for the CSS replacement. Upon completion of the concept definition phase, suitable hardware will be selected for the CSS replacement. Critical CSS functions are scheduled for replacement during FY 86 while non-critical portions will be replaced during FY 88.

The NORAD requirements are being addressed within the WWMCCS Information System (WIS) modernization program as a separate family of functions to be independently modernized. Upgrade of ADP capability at NORAD will not be constrained in any way by modernization of other functional families within the WIS.

Long Haul Communications

Senator Stevens: What measures are to be initiated to improve the survivability of common carrier national telecommunications facilities to EMP?

Answer: In FY 1982, the Office of the Manager, National Communications System, plans to initiate three specific development/implementation efforts to reduce the vulnerability of U.S. common carrier telecommunications facilities to disabling damage from the byproducts of exoatmospheric nuclear detonations (including EMP). These are:

a. Initiate a Government-funded effort with AT&T to protect certain high-capacity coaxial cable transmission systems from power supply shutdown due to MHD-EMP effects.

b. Initiate effort with AT&T to develop and implement, in future fiber optic transmission systems, standard design and maintenance criteria for EMP protection of fiber optic repeaters and terminal facilities.

c. Initiate effort to identify those generic types of common carrier facilities whose failure from EMP effects would have the greatest adverse effects on the traffic handling capacity of the switched networks, assess the probability of the failure of such facilities, and determine the cost versus benefits of alternative protective measures.

Senator Stevens: What is the significance of placing greater emphasis on civilian national telecommunications survivability?

Answer: Today, more than ninety-five percent of the critical telecommunications required to support national security and emergency preparedness; e.g., C^3I, Civil Defense, Continuity of Government, and National Warning; are furnished by the civil telecommunications industrial complex. By emphasizing the survivability of these critical resources, there is a greater assurance of a proper response in a national emergency, which in turn reduces the threat of foreign aggression and the adverse impact from natural disasters. This point is emphasized in a national security telecommunications policy which stresses the need for an endurable communications system as an essential element of our national deterrence policy.

Senator Stevens: Does greater emphasis on potential wartime use of civilian communications systems conflict with peacetime commercial goals?

Answer: Certain technological, physical, and political constraints might cause conflict between the peacetime commercial goal of promoting competition and the national security goal of ensuring survival of the Nation. For example, national security concerns could in some instances inhibit a foreign supplier's participation in a competitive contracting situation for domestic United States telecommunications services or facilities.

Outyear Funding Allocation

Senator Stevens: At this point, on what basing modes are you planning to spend the majority of the outyear M-X funding? Why?

Answer: Although proposed numbers exist for FY 1982-1984, we have not made the final decision on how these R&D funds need to be allocated in order to effectively address the problems peculiar to each mode. Of course, the funding in the years beginning with FY 1985 will depend on the basing mode decision we will make in 1984. Therefore, I would greatly prefer, with your agreement, to provide this information for FY 1982-1984 to you at a later date when we have an allocation we can vigorously defend.

KEY HARDENING PROGRAM MILESTONES

Senator Stevens: The Titan silos are to be hardened from (deleted) pounds per square inch (psi) to 5,000 psi. Has a plan been developed to identify key hardening program milestones that must be developed before decisions on basing locations, force size and modifications are made?

Answer: Key Hardening Program milestones are being developed to identify requirements. Hardness trade studies are on-going concurrently with silo basing design plans in order to meet a 1986 IOC. Two relevant factors have been established.

First, the potential initial basing locations are to be in either Titan or Minuteman silos. Second, preliminary estimates indicate that hardness levels of 5000 psi might be achieved most readily in those Titan and Minuteman silos located in dry soil. As more information on hardening design becomes available, it will be incorporated into the overall design phase of silo construction.

TECHNICAL CAPABILITY TO HARDEN SILOS

Senator Stevens: Former Defense Secretary Brown questions our technical capability to harden silos to a high degree of confidence against a Soviet counter-force first strike. What technical developments have been made over the past few years that would warrant large expenditures of funds on silo hardening, which is acknowledged to be only an interim home for the M-X?

Answer: Over the past several years the nuclear hardening community has been able to test a large number of structures and equipment to various generic stress levels (shock, radiation, electrical surge, etc) associated with nuclear detonations. We are confident that we can withstand those stresses associated with exposure to a one megaton detonation at very close ranges **(deleted)**.

We recognize that absolutely guaranteed survivability is not possible with any level of presently attainable hardening. The real issue, of course, is to create as much uncertainty as possible in the Soviet planner's mind. By this action we establish an improved deterrent posture during the mid-late 1980's, after which other options become available for truly survivable basing.

PERCENTAGE OF MX ICBMS SURVIVING

Senator Stevens: Once the hardening program is completed, what will be the percentage of MX ICBMs surviving against the following attacks:

- a two-on-one SS-18
- a four-on-one SS-18
- a one-on-one SS-18

Answer: For a nominal 5,000 psi silo, and projected capabilities for the majority of Soviet SS-18's in 1986-1988, a one, two. or four-on-one attack by these missiles would result in **(deleted)** M-X survivors, respectively. Were the Soviets to use the more advanced SS-18's becoming available at that time **(deleted)** the survivability would be **(deleted)** respectively.

Purpose of Deep Basing

Senator Stevens: Would deep underground basing for the M-X ICBM enhance our time-urgent counterforce ICBM capabilities, or is it primarily looked upon as a way to maintain a secure strategic reserve force for attack against Soviet cities?

Answer: Neither answer is precisely correct. The purpose of deep basing is to provide a surviving and enduring weapon system that has the capabilities necessary to allow us to threaten whatever targets we must in order to prevail in the post-attack environment.

NUMBER OF AIRCRAFT TO MAINTAIN 100 M-X ICBMS

Senator Stevens: How many aircraft would be needed to maintain 100 M-X ICBMS in an air-mobile configuration? Aside from aircraft procurement costs, have operations and support costs been examined in the development of this alternative?

Answer: Previous studies have shown a requirement for from two to four aircraft for each airborne alert sortie flown. These studies are based on airborne alert mission experience of our bomber alert force, airborne command posts and early warning aircraft.

The actual number of aircraft required to support 100 M-X ICBMs on continuous airborne alert will depend upon carrier aircraft design considerations and the concept of operations. Preliminary aircraft conceptual designs include conversions of present civilian and military aircraft and entirely new, hopefully more efficient designs carrying either one or two ICBMs.

A precise concept of operations will be developed after better design information is available. This will impact not only the number of aircraft required, but operations and support (O&S) costs as well. As a result, O&S costs are not available and have not been examined as yet.

ICBMS IN A NORTH/SOUTH TRAJECTORY

Senator Stevens: This past summer concern was expressed that because the U.S. and Soviets have never fired ICBMs in a North/South trajectory, the claims of ICBM vulnerability may be invalid. How do we obtain information on gravitational data that gives us a high confidence that our ICBM vulnerability intelligence data is correct:

Answer: It is within the discipline of geodesy, a branch of applied mathematics, that the shape of the earth and it's gravitational field is determined. Modern geodesy depends heavily on the use of satellite tracking supplemented with surface gravimetry measurements to provide accurate models of the shape of the earth and it's gravitational field.

Dating from the mid-1960's, the U.S. National Geodetic Satellite Program has improved our knowledge of the size, shape, and gravity field of the earth. This program produced successive refinements in the model of the earth's gravitational field as better satellite tracking data and surface gravimetry measurements became available.

The earth's gravitational field is represented by an infinite series called spherical harmonics. To obtain accurate ballistic trajectories it is necessary to model harmonics for both the launch region and free fall portion of the trajectories.

The launch region gravity model, needed for the powered flight trajectory, is unique to the location of missile launch sites and is easily derived from data obtained through extensive gravimetric land surveys.

(Deleted).

(Deleted).

LATE 1980's SOVIET AIR DEFENSE CAPABILITIES

Senator Stevens: Does U.S. intelligence expect the late 1980's Soviet air defense capabilities will improve to such an extent that they will mitigate the defensive avionics improvements made to the B-1? Can the ALQ-161 acquire broader frequency coverage if the Soviets succeed in operating at higher frequencies?

ANSWER. The low radar cross section and enhanced avionics capability of the B-1B bomber will complicate the Soviet air defense problem even after the present air defense upgrade, now underway, is completed. We do not foresee, at this time, any reason to believe that the Soviets will be able to mitigate the capabilities of the B-1B by the late 1980's, at least not with the present generation of Soviet systems being fielded.

(Deleted).

B-1 TESTS

Senator Stevens: Will the following B-1 tests be required, and are the costs included in the revised $26.957 billion program acquisition cost figure?

-- Electromagnetic pulse testing on the Air Force trestle
-- Full-scale fuselage fatigue testing
-- Climatic testing
-- Weapons release and safety certification

Answer: Each question will be addressed individually.

EMP Testing. Since the B-1B was designed to nuclear hardness specifications (blast, EMP, radiation effects and thermal effects), the Air Force has elected to defer EMP testing until the airframe has been maintained by the using command for a period of time.

This procedure will provide a more meaningful verification of system hardness levels as well as a check of our procedures for maintaining those levels. An estimate of the additional cost for this testing is not yet available.

Fuselage Fatigue Testing. The Air Force has determined that full-scale fuselage fatigue testing is not required if the aft bomb bay modification is not made. The Air Force has no requirement for the aft bomb bay modification, and there are no plans to include it.

Climatic Testing. All-weather testing is included in the R&D funding requested and does not represent an additional cost.

Weapons Certification. Those activities that must be accomplished by the contractor and/or Air Force Systems Command for conventional and nuclear weapons certification are included in the baseline program cost. At IOC, there will be two nuclear and two conventional weapons fully certified (nuclear: B-61 and SRAM; conventional: MK-82 and MK-84).

Further weapons compatibility testing will be accomplished by the using command at the first operational SAC base in conjunction with the training of the initial aircrew cadre. This approach provides the most efficient use of flying hours required to perform both tasks.

With respect to cruise missile carriage, an $800M cost addition to the previous baseline of $19.7B will incorporate a cruise missile carriage capability into the B-1B baseline. This will result in a baseline program acquisition cost $20.5B (FY 81 $).

FORCE THE SOVIETS TO DIVERT RESOURCES

Senator Stevens: Would production of the B-1 force the Soviets to Divert resources away from Stealth countermeasures?

Answer. The Soviets historically develop and deploy systems to meet their perception of long term continuing air defense needs. These perceptions usually include a range or variety of real and potential threats. (Deleted). We believe production of the B-1B will cause the Soviets to shift some defense budget money and priority especially in the area of deployment rates of newly developing systems and in further improvements in weapon system associated electronics. The evolution from the B-1, to the B-1B, to the stealth bomber is probably perceived by the Soviets (deleted). At least some of the Soviet R&D to counter the B-1B will be applicable to the stealth issue. (Deleted).

TARGET COVERAGE A HIGH PRIORITY

Senator Stevens: The report places a large degree of emphasis on target coverage in its analysis of Long Range Combat Aircraft alternatives. Because it has the largest payload, the B-1 frequently emerges as the most survivable and cost-effective bomber alternative in the report.

Should target coverage be given such a high priority in your analysis?

Answer: National policy defines the job to be done. Against this, the ability of the Long Range Combat Aircraft candidates to cover the target system is very important.

The manned bomber force provides a unique dimension of flexibility to the TRIAD of strategic forces. A manned bomber such as the B-1B that can cover the target base serves as a hedge against unexpected failure or less than planned performance of the other legs of the TRIAD. A bomber that provides extensive target coverage with relatively large payloads is also able to place at risk key enduring elements of the Soviet political and military power structure.

Many of these elements are categorized as imprecisely located targets in that they are movable. They include leadership cadres, forces out of garrison, dispersed long-range aviation, and mobile offensive systems. Our sea-based and land-based ballistic missile forces and air-launched cruise missiles can only attack targets whose location is fixed and precisely known prior to launch. Only the strategic penetrating bomber has the capability to seek out and destroy imprecisely located targets.

Thus, it is essential that any new manned bomber have the characteristics (long range, large payload) which allow extensive target coverage. These same characteristics are also useful in projecting power across the spectrum of potential nuclear and nonnuclear warfare.

B-1 PROBABILITY OF WEAPONS ARRIVAL

Senator Stevens: Why is the B-1 probability of weapons arrival judged to be superior to the FB-111B/C?

Answer: Weapon probability of arrival (P_A) is a function of aircraft characteristics, ECM effectiveness and the specifics of the mission plan (i.e., number of penetrators, penetration distance, speed and altitude, whether prior to or following ballistic missile strikes, etc).

The FB-111B/C weapon P_A is lower than that of the B-1B due to the lack of adequate ECM against the acquisition elements of the defense radars, less capable terminal ECM (d) less capable, primarily because of volume and power constraints), and reduced penetration speeds and extended high-altitude flight required by the FB-111 B/C on some sorties in order to provide adequate range to arrive at the target system.

ATB DEVELOPMENT PROGRAM

Senator Stevens: The study states that the ATB development program presents a higher degree of program risk than either B-1 or FB-111B/C. There is little back-up for this statement other than what we already know -- that Stealth is a novel design that may entail manufacturing risks. Can you give me any other reasons?

Answer: The B-1B and FB-111B/C are relatively lower risk programs than the Advanced Technology Bomber (ATB) primarily because both programs represent modification to existing aircraft systems.

The ATB, on the other hand, is essentially a "paper airplane" today. As the ATB matures it will incorporate a family of new and promising technologies which are currently in the early development and concept design stages. Accordingly, as with any high technology program, there are significantly higher degree of technological risks and cost uncertainties associated with the ATB program.

For example, the pace of the overall ATB development will be a strong function of our progress on the individual technologies which comprise the ATB. Additionally, there is a risk factor involved in integrating these individual technologies into a useful, effective, producible and affordable weapon system.

Cost uncertainties are a definite area of risk. Long range fiscal forecasts, while necessary for planning purposes, are vulnerable to various uncontrollable events (e.g., labor disputes, schedule slips, inflation rates, material availability, technological difficulties, etc).

ATB COST ESTIMATES

Senator Stevens: The study states that ATB cost estimates may be understated. Why?

Answer: A background of extensive historical experience coupled with some actual data were available to formulate cost estimates for the B-1 and the FB-111 B/C candidates; similar ATB experience or data are almost nonexistent. Thus, ATB cost estimates were developed using standard parametric methodology and a high degree of subjective assessment regarding engineering and manufacturing uncertainties. As a result, the cost estimates for the ATBs were far less precise.

DEGREE OF ECM EFFECTIVENESS

Senator Stevens: I and the committee staff were briefed last month on the Bomber Penetration Evaluation by General Rosenberg. The bottom line of the briefing was that with electronic countermeasures (ECM) the B-1 can penetrate Soviet air defenses.

What degree of effectiveness are we talking about? 100% 80% 50%?

Answer: Based on independent assessments, the Joint OSD/Air Force Bomber Alternatives Study concluded that (d) ECM effectiveness, considering ECM technique development, recent test results and radar cross-section reduction efforts, was achievable.

DEFENSIVE AVIONICS SUITE FOR THE B-1

Senator Stevens: Can we be certain that the defensive avionics suite for the B-1 (ALQ-161) will assure ECM effectiveness at least the (d) level until the time the B-1 will be used for the cruise missile role and ATB becomes the penetrator?

Answer: No previous bomber defensive suite has been submitted to the degree of testing and evaluation that the ALQ-161 has already successfully completed (while still in a developmental state). The ability to (deleted). ALQ-161 architecture.

Since many of these techniques have been successfully flight tested (deleted) we can say with confidence that the defensive avionics suite can sustain its ECM effectiveness well into the 1990s. The 80's effectiveness level is considered reasonable and achievable. Further, we project that effectiveness will continue beyond the initial deployment dates for the ATB.

OTHER MODIFICATION TO B-1

Senator Stevens: What other modifications are being made to improve B-1 penetration capabilities?

Answer: To further enhance the application of smart electronic countermeasures embodied in the B-1B's defensive avionics suite. the B-1B radar cross-section is being reduced to about(deleted)the size of the B-52 in the critical frontal sector.

The combination of reduced signature and advanced electronics permit the B-1B to employ (deleted). The combination of reduced signature, higher penetration speed, lower altitude, and new advanced ECM significantly reduces theSoviet defense engagement capabilities.

SOVIET COUNTERMEASURES

Senator Stevens: What Soviet countermeasures could we anticipate that might negate these improvements?

Answer. (Deleted).

ALQ-161 DEMONSTRATION AND TESTING

Senator Stevens: Does the ALQ-161 need more demonstration and testing against advanced threats (deleted).

Answer: Yes. Although the changes to accommodate (deleted) have been designed and integrated, testing has not been completed. This testing will be accomplished as part of the planned 1,000 hour flight test program and is included in the baseline B-1B program costs.

ADDITIONAL TESTING AGAINST THE AIM-7M SPARROW 3 THREAT

Senator Stevens: The BPE simulation against the AIM-9M sidewinder missile indicated that more testing is needed to (deleted). The statement was also made that additional testing is needed against the AIM-7M Sparrow 3 threat.

What is the significance of these findings in terms of B-1 survivability against medium-range airborne intercept missiles?

Answer: (Deleted) against infrared missiles ~~are~~ best optimized through analysis and flight tests. There is no doubt that these tools will provide effective counters against this type missile.

The BPE reference to additional testing for the AIM-7M countermeasures was due to late availability of these missiles as well as the fact that the developmental ALQ-161 (deleted).

However, the B-1B ALQ-161 suite will incorporate the (deleted) in terms of B-1B survivability against medium-range air-to-air missiles.

ADDITIONAL TESTING NEEDED ON B-1 ECM

Senator Stevens: Is the additional testing needed on B-1 ECM and penetration aid systems the major component of the additional $1.976 billion needed in R&D expenditures over the next 5 fiscal years?

Answer: The additional testing of the B-1B defensive systems group is not the major component of R&D expenditures over the next 5 fiscal years. Defensive group testing will require approximately 8% of the total RDT&E program costs.

TESTING REQUIREMENTS NEEDED FOR B-1 SUBSYSTEMS

Senator Stevens: On balance, what is your evaluation of the magnitude of the additional testing requirements needed for B-1 subsystems and the prospect that with full funding, these tests will produce an operationally ready bomber capable of a high degree of penetration of Soviet air defenses?

Answer: We believe that with full funding, appropriated in a timely manner, a B-1B IOC in 1986 is readily achievable.

The planned B-1B flight test program consists of 1,000 hours. Over 400 hours will be dedicated to offensive/defensive system evaluation. At IOC, the B-1B will be certified to carry and launch nuclear tipped SRAMs and B-61 gravity weapons and will therefore be capable of standing nuclear alert.

B-1Bs, with their high ingress speed, low altitude capability, nuclear hardness, rapid base escape, low observables and robust electronic countermeasures suite will be a highly effective penetrator well into the 1990s. In addition to its penetration role, the aircraft will be well suited as a cruise missile carrier and a conventional weapon delivery platform well into the next century.

PROCUREMENT OF 8 KC-10 TANKERS

Senator Stevens: The revised FY 1982 budget deletes $500 million for procurement of 8 KC-10 tankers. The justification is that the Air Force now intends to satisfy part of the KC-10 aerial refueling requirements by the use of re-engined KC-135 tankers. In March, the Air Force told the Committee that the KC-10 was needed, in addition to the re-engining of KC-135s. What operational or mission requirements have changed to support deletion of the KC-10 purchase from the FY 1982 budget?

ANSWER: None, the decision to cancel KC-10 procurement was made solely on fiscal constraints. There has been no significant change in air refueling requirements.

Rapid Deployability - US/SOVIET

Senator Stevens. Should the US decide to abrogate the ABM Treaty before 1985, would we or the Soviets be in a better position to rapidly deploy an operational and effective ABM system in defense of its ICBMs?

Answer. The Soviets would be in better position to rapidly deploy an operational BMD system. They already have operational experience associated with the deployed ABM system around Moscow, whereas the US BMD program during much of the past decade has been oriented toward technology advancement. Specifically, from 1975 to 1980, Congressional guidance had imposed restrictions on system prototype efforts. Within the past one to two years the trend in the US has turned toward preprototype systems demonstration to reduce potential deployment lead time. Current plans are to accelerate development to provide the option for a 1984 deployment decision and a **(deleted)** for defense of US ICBMs. US BMD technology appears to be more advanced than the Soviets in some critical areas, such as data processing, and a deployed US system would be highly effective in defense of ICBM silos.

The priorities of the Soviet BMD program appear to differ from the US program and this is reflected both in the Moscow system upgrade and the Soviet regional BMD system, the ABM-X-3. There seems to be little Soviet incentive to deploy a defense of ICBMs. The Moscow BMD system is currently being modernized. In the near term **(deleted).**

ABM

Senator Stevens: Have the Soviets clandestinely deployed battle management radars for a potential nation-wide ABM system?

Answer: While this is more appropriately a question for the Army to respond to in reference to the ability of the U.S. to deploy a system, the Soviets on the other hand have the **(deleted)** system in being. **(Deleted).**

Senator Stevens: Have the Soviets tested Surface-to-Air Missile (SAM) SA-5 radars and interceptors in the ABM mode?

Answer: **(Deleted).**

Senator Stevens: How soon can a Soviet **(deleted)** radar be erected? How does this compare with U.S. ABM radar construction capabilities?

Answer: The **(deleted)** radar can most likely be erected **(deleted).**

Senator Stevens: How many Soviet SA-5 interceptors have been deployed? Have they been tested at altitudes above 100,000 feet? 150,000 feet?

Answer: The Soviets have presently **(d)** sites with **(d)** launchers where each launcher can automatically handle **(d)** missiles stored on rails behind the launcher. **(Deleted).**

Senator Stevens: Does the Soviet Union now have at least a limited nationwide ABM capability? Do they have the potential to incrementally deploy such a system?

Answer: For the Soviets to have nationwide ABM system at the present time depends on what capability **(deleted).**

BMD of Silos

Senator Stevens. Will the US be able to deploy a high-confidence ABM defense system to defend fixed ICBM silos by the late 1980s? What is the maximum leakage tolerance such a system would need to maintain a survivable MX missile in fixed silos?

Answer. The technology is well in hand for the accelerated development and deployment of an effective terminal BMD system. With the cancellation of the MX/MPS basing scheme, the LoAD system development has been reoriented to defense of fixed ICBM silos and is being accelerated to support the decision for a BMD deployment in 1984. If a decision was made to deploy LoAD, **(deleted).**

The maximum leakage tolerance for any BMD system is a function of a number of interacting variables, e.g., size and sophistication of the threat, characteristics of both the defended target set and the BMD system deployment, and survivability objectives. The BMD system concepts (based largely on previous LoAD effort but including consideration of additional new ideas) are currently being considered for defense of ICBMs in fixed silos and a specific system configuration will be selected in December 1981. The maximum leakage tolerance cannot be stated explicitly at this time but it will be less than for MPS, where the presence of a large number of aim points obviated the need for low leakage. However, the terminal defense re-optimization study has already identified candidate system configurations which are based upon proven concepts and state-of-the-art components and which have performance capabilities, including the achieveability of leakage requirements, consistent with the silo defense mission. These study results and the BMD experience on Safeguard, Site Defense, and the on-going LoAD program signify that a high-confidence BMD system can be available to effectively defend fixed ICBM silos by the **(deleted).**

LoAD Warhead

Senator Stevens. Will the LoADs interceptor have to use nuclear warheads to get high kill probabilities? If so, is the nonnuclear warhead program to be terminated?

Answer. The current plan is to develop the Low Altitude Defense (LoAD) interceptor with a nuclear warhead in order to achieve a high kill probability. Even though the nuclear warhead was selected as the baseline for LoAD, the BMD Organization will continue research and development on nonnuclear kill (NNK) capabilities. For more than a decade, the Army has assembled theoretical and experimental lethality criteria for NNK; however, the technology for NNK is not sufficiently mature to be considered as the baseline warhead for LoAD. NNK options are not currently available for BMD systems, irrespective of the altitude regime or defense mission of interest; however, the BMD program is on the threshold of demonstrating exoatmospheric NNK. In FY 82, the Homing Overlay Experiment (HOE) will demonstrate exoatmospheric homing and nonnuclear kill of a US reentry vehicle in flight tests at KMR. NNK technology is less mature in the endoatmosphere than in the exoatmosphere but validation of endoatmospheric NNK is a long range goal.

The development of a nonnuclear kill (NNK) capability could potentially provide significant improvement in BMD system effectiveness. There are a number of obvious advantages which would accrue to the defense if an NNK capability were available. These include the following: greater public acceptance, ease of transport and deployment, no nuclear release requirement, no critical nuclear material limitation, no self-inflicted nuclear blackout, greater testing flexibility during R&D and deployment, and greater siting flexibility. These advantages apply to both the endoatmospheric and exoatmospheric NNK systems. Therefore, an effective NNK capability will be pursued as a growth option for BMD.

BMD Technology Since Safeguard

Senator Stevens. What are the significant differences between the technology in the LoADs development program and that of the old Safeguard program? How will these changes make ABM defense of fixed ICBMs a more realistic option than it was 5 - 10 years ago?

Answer. During the Safeguard era, the real questions of BMD feasibility centered on vulnerability and cost of BMD radars, traffic handling capability (size of the threat), and discrimination capability (ability to differentiate between reentry vehicles and decoys).

Since Safeguard, the BMD R&D program has developed answers to the above feasibility questions, greatly extended the technology of BMD across-the-board, validated much of this technology in full-scale system demonstrations at the Kwajalein Missile Range (KMR), and designed innovative system concepts (such as LoAD) that take advantage of this new technology. Major technology advances since Safeguard that contribute to LoAD feasibility and effectiveness include the following: (1) advances in distributed data processing capability, to include microelectronics and software techniques, (2) demonstration of effective discrimination of reentry vehicles (RVs) from clutter and penetration aids, (3) miniaturization and simplification of missile electronics and components that increase reliability, reduce cost, and minimize susceptibility to nuclear effects, (5) advances in high frequency techniques, component miniaturization, and fabrication techniques for phased-array radars that have reduced the size and cost of BMD radars and improved their capabilities, and (6) techniques to develop system components (interceptor, radar, and data processor) that can operate successfully from extended dormancy.

LoAD constitutes a system that is based on both proven BMD principles and techniques and innovative technology that strengthens the capability to perform critical BMD functions. The application of these principles and the evolution of technology over the past 5 - 10 years has enabled dramatic improvements in BMD capability since the Safeguard era. Specifically, as a result of advances in high frequency techniques and microelectronics, the size and unit cost of BMD radars and data processors have been substantially reduced. This allows the LoAD system to cost effectively employ both increased numbers of small radars and deceptive basing to mitigate the problems of radar vulnerability and blackout. This represents a major advance in BMD capability (vis-a-vis Safeguard).

With respect to traffic handling and discrimination capabilities, technology and techniques have been developed and demonstrated which can confidently perform these critical BMD functions. Under the System Technology Validation Program (STVP), the Site Defense radar and a commercial data processor, as well as tactical applications software were installed at KMR and 48 live tracking missions were conducted. During this program, solutions to the following critical issues were demonstrated: bulk filtering to substantially reduce threat traffic; discrimination of RVs from clutter and penetration aids; demonstration of real-time software; and operation in unmanned and dormant modes. Specifically, the bulk filter eliminated over (deleted) of the hundreds of pieces of tankage without putting them into track, thus reducing required radar and data processing resources. In addition, out of more than 150 tries at discrimination on an actual RV or decoy, the radar and data processor classified the object correctly more than (deleted) of the time.

The LoAD system incorporates the extensive experience and technology which has evolved through the Safeguard and Site Defense programs, as well as the recent and continuing technology advances emerging from the BMD Advanced Technology Program. These technology advances coupled with deployment schemes that provide maximum leverage against the offense result in a LoAD system that provides an improved cost-exchange ratio for the defense. Thus, LoAD is an attractive and realistic option for increasing the survivability of silo-based ICBMs.

Silo Defense Option

Senator Stevens. What efforts were undertaken by the Administration before the MX decision to preserve the Minuteman silo defense option? Are the fiscal requirements needed to initiate LoADs deployment larger or smaller than those for the air-mobile and deep underground basing options.

Answer. In compliance with OSD directive in 1979 the Army was tasked to develop LoAD as a generic ballistic missile defense system. Since, at that time, the basing configuration of MX was still undetermined, it was prudent to address more the one defense application for LoAD. The Army initiated Phase I of the LoAD preprototype demonstration (PPD) program to design, develop, and test generic system components that could be used for defense of MX in multiple protective shelters (MPS), MX in fixed silos and/or MM in fixed silos. Phase II would have been directed toward the mission peculiar aspects of a specific defense application. Phase I and II would have been followed by full scale engineering development, production, and deployment if a decision for deployment were made. As a result of the Administration's decision to base MX in existing silos, the LoAD R&D program will be restructured from the PPD to an accelerated development effort to support a 1984 BMD deployment decision for defense of silo-based ICBMs and other hard targets.

The funding (in then-year dollars) needed to support a 1984 LoAD deployment decision is $263M in FY 82, (deleted) Out-year funding requirements to support a LoAD deployment (d) are being determined and will be available this fiscal year. Costs of air-mobile and deep underground basing options are not available within the Army.

Out-Year Funding for LoAD

Senator Stevens. When will Congress receive out-year estimates for LoADS R&D and procurement? Can they be given prior to a decision to deploy or not deploy, so that Congress can know the extent of the funding requirements?

Answer. The LoAD program is being reoriented to support a 1984 deployment decision. Funding requirements (in then-year dollars) through FY 84 are $263M in FY 82, (deleted). The out-year funding requirements (including engineering development, production, and deployment) are being evaluated and will be available later this fiscal year.

Exoatmospheric BMD

Senator Stevens. What is the policy of the Administration on further R&D on exoatmospheric BMD? Is a layered defense under consideration? If so, would there not be need for additional funding for BMD beyond FY 1984?

Answer. It is the policy of the Administration to pursue further R&D on exoatmospheric BMD to resolve critical technical issues associated with nonnuclear kill in the exoatmosphere. Yes, layered defense is under consideration as it is the preferred BMD growth option to defend fixed-based ICBMs against heavy growth threats. In addition, the layered defense concept is applicable to a variety of other strategic military targets (e.g., SAC bases, command and control centers, and NCA). The development of layered defense is funding constrained, particularly the exoatmospheric portion. Current funding for exoatmospheric defense allows for addressing such critical technical issues as exoatmospheric homing and nonnuclear kill; LWIR optical detection, discrimination, designation, and tracking; onboard optical sensor for attack assessment and characterization; and optical signature data base. There are additional critical issues associated with the exoatmospheric BMD which cannot be resolved with the present constrained funding plans. Among these are command and control, optical discrimination against responsive threats, production of optical sensors, and development of a tactical interceptor. In order to address these additional issues in a timely manner additional funding is needed for the next several years.

Space-Based Lasers

Senator Stevens: The Defense Science Board report on the DoD Space-Based Laser study recommends that BMD applications for space-based lasers will be difficult to achieve in the immediate future, and that we should concentrate our space-based laser efforts in the anti-aircraft and ASAT area. Do you have any comment?

Answer: The DoD concurs with the assessment of the DSB Task Force that "BMD is probably the most difficult task for a laser weapon system, and it remains for the present well beyond our reliably predictable capabilities." Cost estimates for deploying a damage limiting BMD system are very large and time estimates run beyond the turn of the century. Other mission applications, such as anti-aircraft and anti-satellite, could be performed by significantly less capable laser weapon systems, which might be developed sooner and at less cost. Our ultimate goal however, should remain in the direction of an effective BMD system based on the significant potential of such a system. Even in the less demanding anti-aircraft and anti-satellite systems, there are areas of major uncertainty in our ability to predict with confidence the ultimate utility of space-based laser weapons for particular mission requirements. A decision on whether to commit to a system development, including an on-orbit feasibility demonstration, should not be made until the uncertainties in technology and ultimate utility are resolved. The DoD plans to pursue an aggressive research program to reduce these uncertainties. We plan to augment the current space-based laser program by approximately $50 million per year, with increased Air Force participation, to address critical uncertainties in mission utility, system design and survivability, and technology development. This augmented program will attempt to:

- o Continue the current Defense Advanced Research Projects Agency program;
- o Place additional emphasis on short wavelength laser development;
- o Establish realistic bounds on laser weapon lethality and responsive hardening countermeasures;
- o Develop detailed concept definitions for total space laser weapon systems. Understand key technological and operational aspects with emphasis on system survivability;
- o Resolve surveillance and command and control uncertainties through architectural and requirements definition. Conduct technology risk reduction programs;
- o Establish space laser weapon utility through extensive mission effectiveness analyses; and
- o Refine system development planning to reduce uncertainties in cost and schedule estimates.

SOFAS

Senator Stevens: Does the Administration intend to develop SOFAS, the Survivable Optical Forward Acquisition System for use in attack assessment and possibly launch on warning?

Answer: The SOFAS would apply technology that is being developed for possible ballistic missile defense applications to missile warning and attack assessment. We intend to continue the development of this technology and to consider its application to the missile warning role. SOFAS may provide an option for a rapidly reconstitutable system with considerable capability to support our requirement for enduring warning. However, **(deleted)**.

(IOC) FOR A MODERATE RISK ATB PROGRAM

Senator Stevens: What would be the initial operational capability (IOC) for a moderate risk ATB Program?

Answer: The IOC of an ATB, stealth-type bomber is a strong function of our progress in developing the family of stealth technologies. While these technologies are indeed promising, they are currently in the very early stages of design and concept development and like all early development programs, there are uncertainties that require time to mature. We are proceeding at the fastest, prudent pace with the development of the ATB.

A reasonable estimate for a moderate risk ATB IOC would be the early 1990s.

IOC FOR HIGH RISK ATB PROGRAM

Senator Stevens: What would be the IOC for high risk (earliest possible date of initial operating capability) ATB Program?

Answer: Some have estimated that if one were willing to spend vast amounts of funds and accept high risks, that an IOC in the very late 80's might be possible. However, such a program would indeed be extremely high risk and the possibility of success would be slim. More importantly, the resulting aircraft would most likely not turn out to be nearly as suitable as an aircraft produced under a more rational approach.

The ATB is now only in the very early stages of design and concept development. At this time, it is basically a "paper design." The technologies involved are exciting and promising, but because of the major advances required in several technologies and the consequent uncertainties involved, a significant acceleration of this program most likely would result in untenable schedule and cost risks. It is the consensus of our best technical advisers that such an acceleration would be neither prudent nor feasible.

Therefore, the earliest IOC for the ATB proceeding at the fastest, prudent pace, would be the early 1990s.

ATB R&D AND PROCUREMENT COST PROFILES

Senator Stevens: Are you aware and concerned that ATB R&D and procurement cost profiles for FY 1982-90 have been leaked, and appeared in the October 12, 1981 issue of Aviation Week and Space Technology?

Answer: We are aware of the article in Aviation Week and Space Technology and have no comment.

IMPACT OF LEAK ON THE ATB

Senator Stevens: What impact will the leak of this information have on the ATB program? Is it considered serious?

Answer: The Air Force has no comment on this article.

Expanded Civil Defense Initiatives

Senator Stevens: What expanded initiatives are included in the Administration's civil defense program?

Answer: Shortly after assuming office, this Administration began a rigorous review of existing civil defense programs and policies. Since February, DoD has actively participated in an ongoing series of interdepartmental meetings aimed at acquiring a posture sufficient for our country's needs and at developing options for the President's choice.

The meetings continued over the summer, examining both the current program and possible alternatives from four aspects:

- Scale, or the number of survivors they would produce;
- Scope, or the extent to which they provided protection for all vital sectors of national society;
- Schedule, or the earliest attainable dates at which a viable capability could be achieved, and finally
- Cost, or the amount of dollar resources required to achieve various levels of capability in terms of scale, scope and schedule.

That review is now in its final stages. While it would be inappropriate for me to comment in more detail in the absence of a final program and policy decision, I can say that the Administration recognizes the significance of civil defense as an element in our strategic posture, and the need for a sound and viable program. We are committed to attaining a balanced, realistic capability that will improve our present posture, and to those initiatives appropriate for acquiring that capability in a cost effective manner.

Crisis Relocation Planning

Senator Stevens: Is the Administration considering planning for a crisis relocation capability?

Answer: Yes. Since crisis relocation is one of the most cost effective approaches to population protection, it has received close attention during the civil defense program and policy review. Given the status of current deliberations on the future program, it would be inappropriate for me to speculate at this time about the exact place it will have in the overall improved program.

SOVIET AIR DEFENSES

Senator Stevens: Mr. Secretary, our closed session this morning with the Central Intelligence Agency people was most revealing. The effect of the testimony was that low flying B-52, in concert with a Cruise missile assault, could penetrate Soviet air defenses for the rest of the 1980s. Obviously, this raises a serious challenge to the repeatedly stated need for an interim bomber such as the B-1. Can you comment specifically on this question?

Answer: The statement that a combination of low flying B-52s and Cruise Missiles could penetrate Soviet Air Defenses for the rest of the 1980s is not true. There are two major factors relative to the penetrability of the B-52 versus the B-1 and both are dependent on the relative cross sections of the two bombers. It is estimated the B-1 cross section will be on the order of **(deleted)** dependent on frequency. **(Deleted)**

i.e., the range is inversely proportional to the forth root of the range. With **(deleted)** jamming, the jamming power required on-board a B-52 would be **(deleted)** greater. It may not be practical to equip B-52 with **(deleted).**

Relative to the question "Would it be more appropriate to spend our resources on other weapons systems," it is suggested that Air Force should more appropriately answer any cost questions. However, there are a number of other factors which should be considered as follows:

a. If we concentrate our aircraft threat purely on cruise missile carriers, the Soviets could then optimize their defenses against a single threat, **(deleted).**

b. Unfortunately, some percentage of the carriers would have to penetrate in order to strike targets deep in the Soviet Union. Therefore, you have an identifical probelm as the penetrating bomber.

c. Terminal SAM defenses such as the SA-10 will be the weapon system which will **(deleted).**

In summary, a mixed bomber/cruise missile carrier force would require the Soviets to **(deleted).**

QUESTION THE URGENCY OF THE B-1

Senator Stevens: (Deleted). Doesn't this question the real urgency of a B-1 bomber force?

Answer: (Deleted).

BUILD CRUISE MISSILE LAUNCHER FOR LESS THAN THE B-1

Senator Stevens: As we discussed in the open portion of the hearing, if there is any serious question on the urgent need of an interim penetrator, then there is certainly a need to question the heavy investment involved in reviving the B-1. Surely we can build cruise missile launchers that come at much lower cost than the $200 million-plus price of a B-1.

Wouldn't our resources be better used on other weapon systems, given the current status of Soviet air defenses?

Answer. The B-1B is not an interim penetrator. The B-1B, as directed by Congress, will be a "multirole bomber" capable of delivering nuclear weapons into the Soviet heartland well into the 1990s, with the ability to perform as a cruise missile carrier and conventional bomber well into the next century.

In its cruise missile carrier role--unlike dedicated cruise missile launchers--the B-1B has the ability to "shoot and penetrate" as required.

In addition, the B-1B has the inherent flexibility to provide a wide range of other vitally needed capabilities: strategic bomber, theater conventional and nuclear delivery system, worldwide force projection, and maritime support system. The extended range of the B-1B allows the U.S. to project whatever force is required in the most appropriate role whenever and wherever needed.

INCREASE IN R&D COSTS OF THE B-1

Senator Stevens: The Washington Post disclosed this morning that research and development costs of the B-1 bomber have increased from $500 million to $1 billion beyond the level identified to Congress. Is this true, and if so when will we be provided with the updated information?

ANSWER. The Washington Post article was in error. The reporter inadvertently misquoted his source.

The initial report, which was the reference document for the article, was an Air Force Independent Cost Analysis (ICA).

The ICA found the Air Force cost estimate for the total development and production baseline B-1B program to be reasonable--it was within three percent of the Air Force estimate.

The three percent, which equates to the $500 million to $1 billion figure, should not be considered growth. The ICA is simply an independent estimate and until contracts are signed and work is performed, that is all it is — "an estimate" — and should be treated accordingly.

INITIAL OPERATING CAPABILITY FOR THE ATB

Senator Stevens: It is impossible to discuss the urgency of a B-1 bomber force without getting into at least some details of the advance technology bomber. I don't know at what point we get into the special access areas of this program, but we do need to know right now your best judgment as to the initial operating capability for the ATB.

Answer: The ATB program is consistent with an early 1990's IOC. It is our judgement that this is the fastest, prudent pace for this technology.

TOTAL OVERALL COST OF DEVELOPMENT PROGRAM FOR ATB

Senator Stevens: And what are you currently estimating as the total overall cost of the development program? The total procurement phase?

Answer: Development costs for the ATB program will be approximately (d) in constant 1981 dollars. It is difficult to estimate procurement costs until the vehicle configuration has been completely defined.

COSTLY FEATURES OF ATB

Senator Stevens: Don't many of the costly features of ATB run concurrent with the increased funding necessary to finance the purchase of 100 B-1 bombers?

Answer: The B-1B IOC is planned for 1986 while the ATB IOC will not occur until the early 1990's. As a result, B-1B costs will have phased down prior to significant ATB funding requirements.

NORTHROP AS PRIME CONTRACTOR FOR THE ATB

Senator Stevens: Could you please background the Committee on why it was necessary for the Air Force to announce the selection of Northrop as prime contractor for the ATB.

Answer: Yes. The background has been provided to Mr. Dwyer and Mr. Rhodes of the subcommittee staff.

JUSTIFY THE $20 BILLION-PLUS INVESTMENT OF B-1 PROGRAM

Senator Stevens: Retracing, it would appear that the role of the B-1 as a penetrator to supplant the B-52 would be short indeed. It really would not be urgently needed for this task until 1990 and we are talking about an ATB availability that comes soon after. Given the cost of the B-1 program, can we really justify the $20 billion-plus investment?

Answer. We must augment our strategic nuclear capabilities and begin replacing our aging B-52s. We estimate that advances in Soviet defenses throughout this decade will make it increasingly difficult to penetrate these improved defenses in the late 80s and beyond. However, our earliest (fastest, prudent risk) estimate for the ATB initial operating capability (IOC) is the early 1990s.

On the other hand, DOD analyses based on test results indicate that the B-1B would have the capability to penetrate anticipated Soviet air defenses well into the 1990s in a multitude of employment modes and to perform effectively as a cruise missile carrier and as a conventional bomber into the next century. Far from being simply a short term contributor, the new B-1B represents a significant and long-term addition to our strategic forces as a multirole long-range combat aircraft.

There are also two major areas of cost avoidance associated with the proposed bomber program of B-1B and ATB which are not generally recognized. First, were we to follow original plans and place almost total reliance on our aging B-52 force out to the year 2000, then the cost of this effort, including modifications for cruise missile carriage and essential improvements, would have exceeded the entire cost of the B-1 program.

Second, if we were to follow this course, we would still have been faced with the need to develop and produce a new cruise missile carrier aircraft to eventually replace the B-52s. The cost of this program alone would again exceed the cost of the proposed B-1B effort.

Furthermore, the proposed combination of forces has high operational utility. The B-1B, in conjunction with cruise missiles and the ATB presents an extremely difficult problem to the most sophisticated defense system--thereby requiring major expenditures by the USSR on defensive systems, expenditures that could otherwise be made on systems capable of attack on the US and its allies.

HARDENING EXISTING SILOS FOR THE M-X

Senator Stevens: Can we talk a bit more frankly in closed session over the wisdom of hardening existing silos for the M-X? Is that reallly a wise expenditure?

Answer: The decision to further harden our M-X silos is made on the presumption that it increases a Soviet attack-planner's uncertainty, and further complicates his required style of attack. It thereby provides an improved measure of deterrence for an interim period in the mid-late 1980s, while other, more survivable basing modes are prepared for deployment.

Superhardening costs relatively little, less than 5% of the total requirement to produce 100 deployable M-X missiles with up to 50 in superhard silos. Accordingly, we believe it is a very cost-effective expenditure.

COST DATA TO BACK UP DECISION ON M-X SILOS

Senator Stevens: Do you have any cost data to back up such a decision?

Answer: The President's decision was based on a number of considerations, cost being only one of them. It was his opinion, however, that the ultimate survivability of the MPS basing mode was not as certain as he believed necessary. We have therefore decided to pursue follow-on basing options to improve our confidence, and deter Soviet proliferation. As such, the decision was not based on a detailed cost comparison of options.

REALISTIC ALTERNATIVES FOR M-X SILOS

Senator Stevens: Do we have any realistic alternatives short of the desert basing scheme?

Answer: For the long-term, there are several realistic alternatives as outlined in the President's plan. These are:

a. Continuous Patrol Aircraft - A survivable, fuel efficient, long endurance aircraft that could launch M-X.

b. Ballistic Missile Defense.

c. Deep Basing - Deploying ICBMs in survivable locations that are in the deep underground.

Our research efforts will provide the information for a choice among the alternatives about 1984 and follow-on deployment in the late 1980's or early 1990's.

In the interim, there is no realistic alternative to silo deployment for getting M-X technology off the shelf and into the field. Deploying M-X is vitally important for near term capability and for insuring M-X availability for the long-term solutions.

DEEP UNDERGROUND OPTION FOR M-X

Senator Stevens: How viable is the deep underground option for M-X? And how much would we have to spend on R&D to find out a certain answer to that question?

Answer: Deep Basing may be viable as a means of maintaining a survivable secure reserve force. Approximately $200 million is required for research and development to determine Deep Basing feasibility.

AIR LAUNCH OPTION FOR THE M-X

Senator Stevens: Tell us more about your air launch option for the M-X. We detect this has some favor with you. Do you have any cost estimates and operational detail on this kind of an approach?

Answer: The fundamental objective of Continuous Patrol Aircraft (CPA) is to define a survivable, acceptably safe and cost effective air launched ICBM whose primary operating mode will be continuous airborne alert.

The goal is to examine CPA as an M-X deployment option for the early 1990's and establish cost and program schedules to allow a preliminary assessment as early as possible and a final decision on further development not later than late FY 84.

There is currently no cost or operational detail available.

QUESTIONS SUBMITTED BY SENATOR STENNIS

INCREASE IN R&D COSTS OF THE B-1

Senator Stennis: The Washington Post disclosed this morning that research and development costs of the B-1 bomber have increased from $500 million to $1 billion beyond the level identified to Congress. Is this true, and if so when will we be provided with the updated information?

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PRIME CONTRACT PRICE RISE

Senator Stennis: The estimated program cost has been rapidly rising since the current Administration came into office in January. Doesn't it look as if the prime contractor decided the program was going to go and then started to raise the price?

Answer: The baseline B-1B program cost estimate, as provided by the Air Force, has remained firm at $19.7 billion (FY 81$) since May 1981. Recently cruise missile carriage capability was added to the baseline bringing the acquisition cost up to $20.5 billion (FY 81 $).

The DOD has established strict change control procedures for the B-1B program and particular management attention will be paid to limiting cost growth. No change to the presently planned B-1B acquisition program or major changes in configuration can be made without approval of the Deputy Secretary of Defense.

STRATEGIC AIR COMMAND (SAC)

Senator Stennis: I am told there was a Strategic Air Command (SAC) Penetration Study that indicated the FB-111B/C was substantially better than the B-1B. Would you discuss the findings of this study and tell us the key parameters used in evaluating penetration capability.

ANSWER. I am not aware of any SAC penetration study which indicates that the FB-111B/C would be substantially better than the B-1B. On the contrary, General Ellis, the former CINSAC, recognized in prior testimony that the FB-111B/C would be a less capable aircraft than the B-1B in both central nuclear and non-nuclear worldwide force projection roles.

I suspect the SAC study you refer to is one entitled " Manned Pentrator Study - 87" (MPS-87). In that study, the key parameter used in evaluating penetration capability was radar cross section (RCS). The principal observation drawn from the study was that major RCS reductions stress the projected Soviet air defenses and enhance penetration capability.

Additionally, MPS-87 examined two excursions -- defense suppression and electronic countermeasures (ECM) -- to the base case focus on RCS. However, MPS-87 treatment of defense suppression was limited to consideration of interceptor base suppression. Significantly, neither airborne nor ground-based warning and control system suppression were addressed, even though both provide a further reduction in interceptor encounters. Also, in spite of promising development and test results to the contrary, the effect of ECM was constrained to only one link (radar air-to-air missile) in the chain of events that must occur for hostile forces to destroy a penetrator.

Finally, there is general agreement that very low RCS enhances penetration. However, other analyses indicate that defense degradation resulting from a prior ballistic missile attack and ECM versus both airborne and ground-based radars provide similar enhancements to penetration.

A more comprehensive comparison of the B-1B and FB-111B/C is contained in the Joint OSD/Air Force Bomber Alternatives Study which addressed all significant parameters. It indicates that the B-1B employing a combination of low altitude, high subsonic speed and ECM coupled with reduced RCS will substantially exceed FB-111B/C performance limits and will successfully penetrate well into the 1990s.

ALCM ROTARY RACKS ON B-1

Senator Stennis: Your statement mentions that cruise missiles will be deployed on B-52G and H models and B-1's when these aircraft are available. Is it your plan to have the ALCM rotary racks which will carry the missiles available for initial deployment of the B-1 aircraft?

If not, when will these racks be available and what will be the increase in program cost to achieve this capability?

Answer: A recent OSD program decision memorandum directs the incorporation of cruise missile carriage in the B-1B baseline configuration.

The Air Force plans to incorporate external carriage of 14 ALCMs at the earliest opportunity in the production sequence (not later than aircraft number 19) with early production aircraft being retrofitted for this capability as soon as possible.

Internal carriage (eight ALCMs on a rotary launcher) will be added as the common strategic rotary launchers (CSRL) are produced and cruise missiles become available; $800M (FY 81 $) is programed for complete ALCM integration capability. These funds are included in the baseline program cost of $20.5 billion (FY 81 $).

SECONDARY MISSION OF THE B-1B

Senator Stennis: Much is being made of the secondary mission of the B-1B as a cruise missile carrier. Isn't it true that the B-52 G and H models can easily accommodate this mission during the time-frame of the late 1980's and early 1990's at a fraction of the investment cost of the B-1 aircraft?

Answer: The B-52 G/H models can and will accommodate the cruise missile carrier mission. Our plan is for selected B-52 G/Hs to assume this mission as their primary role in the second half of the 1980s, at which time we estimate advances in Soviet defenses will greatly reduce their capabilities to function as an effective penetrator. This approach, by itself, does not address the continuing need for a penetrating bomber capability.

During this same period (mid-late 1980s) the B-1B, with its significantly reduced radar cross section and advanced electronic countermeasures, will become the primary penetrating bomber. In accordance with Congressional direction to develop a multi-role strategic bomber (to include cruise missile carriage), the B-1B long range combat aircraft will have the cruise missile launch mission as an additional capability.

The plan outlined above will continue to use efficiently the remaining capabilities of the aging B-52 fleet as cruise missile launch platforms, while developing a multi-role bomber (B-1B) which will have the capability to penetrate Soviet air defenses well into the 1990s in a multitude of employment modes and to perform effectively as a cruise missile carrier and as a conventional bomber into the next century. Thus, over the longer term we may well realize a savings by investing in the B-1B, as opposed to attempting to retain the aging B-52 G and H models beyond their estimated useful life.

TOO MANY EGGS IN ONE BASKET

Senator Stennis: There are a number of authorities that believe the Administration is putting too many eggs in one basket. In other words, the President is recommending substantial increases into programs designed for strategic nuclear deterrence at the expense of our currently available assets to fight limited or controlled escalation warfare. Is this really wise?

Answer: We believe the Reagan strategic program is not only wise but affordable as well. The program fits within the fiscal guidelines recently announced by the President. In the early- to mid-1960s, spending for strategic nuclear programs rose to a level of 20 percent of the total DoD budget. (Many of these forces are still in the inventory today.) For many years in the last decade, strategic spending never exceeded ten percent of the DoD budget. Now, as we modernize all three elements of our Strategic Triad, we expect the strategic programs to amount to no more than 15 percent of the DoD budget. This, by the way, is in contrast to spending for general purpose forces and support activities which historically have consumed three to five times as much of the DoD budget as strategic forces spending. Therefore, the Reagan strategic weapons programs certainly do not amount to all our eggs in one basket.

EUROPEAN RESISTANCE TO GLCM AND PERSHING

Senator Stennis: What are your feelings about the resistance being shown by elements in Europe to the introduction of the ground-launched cruise missiles and the PERSHING II ballistic missiles? Do you advocate going ahead with the current plans?

Answer: Vocal opposition in Europe to the deployment of these systems has not affected the development or deployment schedules of the PERSHING II or Ground-Launched Cruise Missile. At Gleneagles, Scotland, NATO Defense Ministers reaffirmed their commitment to proceed with the Alliance's December 12, 1979 decision to pursue the modernization of its Long-Range Theater Nuclear Forces (LRTNF) and at the same time enter into arms control negotiations involving TNF. The LRTNF modernization program is on track and arms control negotiations will begin in Geneva, Switzerland, on November 30th.

If the US were to do anything less than move forward with our plans for LRTNF deployment, we would risk unraveling the very consensus on LRTNF modernization that we have for so long sought to preserve,and we would send the wrong signal to the Soviet Union. By not moving ahead with plans to meet our commitment to base LRTNF in Europe, we would encourage the Soviets to heighten their propaganda campaigns in Europe against NATO's TNF program and at the same time we would provide little incentive for the Soviets to engage in serious arms control negotiations. Now, more than ever, it is essential that we press forward with our plans to deploy PERSHING II and GLCM in Western Europe.

TOO MUCH CONCURRENCY

Senator Stennis: Your program proposes $2.4 billion in fiscal year 1982 for further development work and procurement of two aircraft. Your statement mentions that the current B-1 design must be altered to make the new B-1B a more capable strategic weapons system. Isn't this too much concurrency? Would we be better off to continue the development effort in 1982 and then go for procurement of the initial airframes in 1983?

ANSWER. Because the B-1B is a derivative of the original B-1, we are confident that the planned program can be accomplished successfully within the cost and schedule allocated. The B-1B is not a new design, but an outgrowth of the B-1A aircraft. Almost 2,000 flight test hours were completed successfully on four B-1A aircraft to demonstrate the aircraft's air worthiness as well as its operational utility.

Much of the B-1B hardware/software has been developed. For example, the B-1B offensive suite is a combination of B-1A and B-52 OAS equipment. Both subsystems have been independently tested, as have most of the B-1B subsystems.

In general, the primary focus of the development efforts are an outgrowth of proven technology and systems rather than in development of new technologies. We are therefore confident that the program we have defined is relatively low risk and that we will be able to achieve our cost and schedule goals,

PURSUING THE "TWO BOMBER" APPROACH

Senator Stennis: Your statement mentions that pursuing the "two bomber" approach will stimulate competition and assist in controlling costs. I'm not sure that I follow this reasoning. The Administration is advocating the purchase of 100 B-1's with an IOC in 1986 and current plans are for the initial deployment of the Advanced Technology Bomber is the early 1990's. It seems we are embarking on procurement of two separate weapon systems in two different periods of time. Where does the competition between the two aircraft come in?

Answer: Because the Advanced Technology Bomber (ATB) is an advanced research and development program which is about a decade from production, cost estimates, program schedule, and technical milestones are very flexible at this time.

By committing to a B-1B, the Air Force reduces the risk of a high technology program. The ATB contractors are fully aware that if either the advanced technologies do not develop as desired or if these programs are mismanaged, the Air Force will have the option of producing more B-1Bs from an active assembly line. Furthermore, as a result of the realities of coming down the "learning curve", additional buys of B-1Bs will be much cheaper than the average cost of the initial five lots.

In turn, Rockwell, the prime contractor for the B-1B, will be encouraged to produce the best possible airplane at the most reasonable cost to keep an additional buy option attractive to the Air Force. On the other hand, should Rockwell encounter problems or schedule delays, etc., and the ATB advances at the expected pace, the Air Force has the option of buying less than 100 B-1Bs.

B-1 WILL COST SUBSTANTIALLY MORE

QUESTION. A number of authorities believe that the B-1 will cost substantially more than the so-called "official" estimates. Has the Department considered the possibility of substantial cost increases and if they occur, how would the Department propose to accommodate them? Would you look to the Advanced Technology Bomber and slide this program?

ANSWER. The Air Force holds firm to the $20.5 billion (FY 81$) cost estimate for a program which produces 100 cruise missile carrying B-1Bs.

The DOD has established a system of strict change control procedures, streamlined management, and prompt reporting of programmatic issues. Particular management attention will be paid to limiting cost growth in the airframe, support equipment, and avionics areas. Every effort will be made to keep this program on schedule and within cost. The ATB will, by coincidence, assist the Air Force in this endeavor.

The ATB and the B-1B programs have a degree of synergism. B-1B production reduces the risk of the ATB program. If the ATB should encounter serious developmental difficulties, the B-1B production could be extended beyond the 100 aircraft buy. On the other hand, a B-1B program compels the ATB contractors to perform as effectively and efficiently as they can--for the B-1B is a viable competitor and the ATB is not the sole solution to our bomber force modernization needs.

Likewise, ATB development pressures the B-1B contractors to produce as economical and reliable a product as possible. For example, cost overruns or schedule delays could result in the Air Force curtailing the planned 100 aircraft B-1B buy.

SUBCOMMITTEE RECESS

[Whereupon, at 11:45 a.m. the subcommittee was recessed to reconvene at the call of the Chair.]

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